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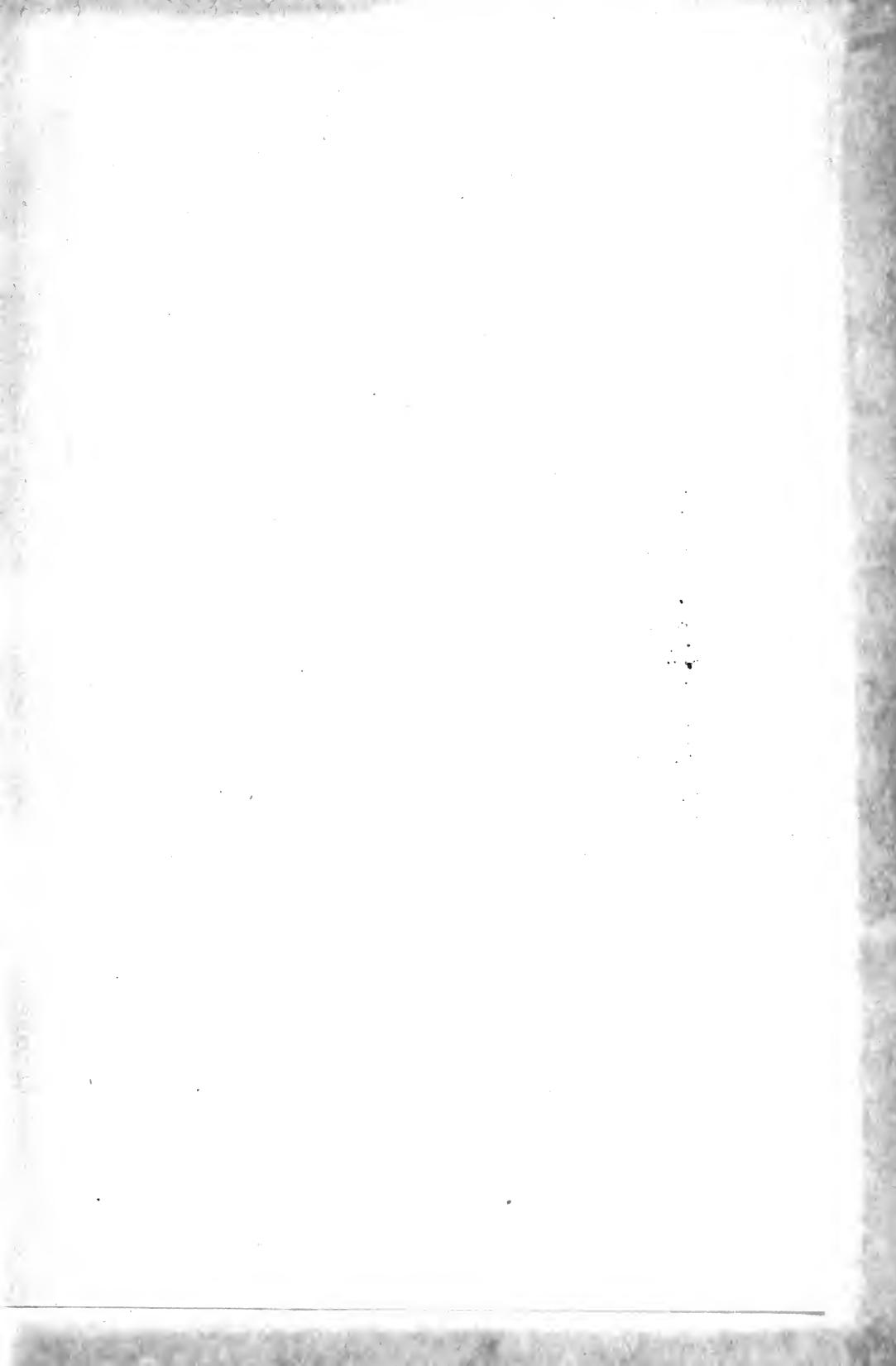
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CATALOG

AGGELER & MUSSER SEED CO.

LOS ANGELES, CAL.

W. B. EARLY



CABLE ADDRESS,
"JONMUS"
W.U. CODE



MAIN STORE
113-115 N. MAIN STREET.

TELEPHONES | SUNSET MAIN 4545.
HOME A-3094



VEGETABLE, FIELD,
FLOWER SEEDS
BULBS AND PLANTS
NURSERY STOCK
FLORISTS' SUPPLIES
POULTRY SUPPLIES
STOCK FOODS, ETC.

Los Angeles, Cal., February 9th, 1915.

Prof. E. J. Wickson,
University of California,
Berkeley, Calif.

Dear Sir:

In order that you may have a substantial catalog before you throughout the year, we are mailing you one from our office.

Yours very truly,

AGGELER & MUSSER SEED CO.,
Per *H. L. Musser*,
B
President.

HLM/W







Aggeler & Musser Seed Co.

TWENTY-SECOND
ANNUAL CATALOGUE

1915

SUNSET:
MAIN 4545
HOME:
60875

PHENOMENAL
BERRY

LOS ANGELES, CAL.

To Our Friends and Patrons:

Again we have the pleasure of greeting our many customers through the medium of our annual catalog, which we have endeavored to improve over all past issues. It may be needless for us to tell our many permanent customers of the quality of our Seeds, Plants, and Bulbs; but to those who receive this catalog, and who have never used our goods, we ask a trial order.

That we may assist the newcomer with his family garden; we have prepared a garden manual, thirty-two pages full of valuable information. It is free with your first order for seeds. Ask for it.

ORDER CORRECTLY—Give name and full address plainly written. State how you prefer to have the seeds sent,—by mail or by express. Send sufficient money to pay for what you order, including postage or express charges when necessary to prepay. The price list plainly indicates what we prepay; when not so stated, we deliver to the transportation company f. o. b. Los Angeles.

KEEP A COPY OF YOUR ORDER—Check goods received with this copy. Sometimes items are sold out, or will follow later, in which case a slip is enclosed with goods, or notice sent. In case of error, notify us immediately, that correction may be made.

ORDERS ARE PROMPTLY FILLED—Or in case of delay, you are immediately notified by postal card. If you do not hear from an order sent us, within a reasonable time, send us a duplicate order covering date of order, amount of same and form of remittance, your name and full address. If you cover these points in your first letter, a long delay is often saved in tracing your order.

OUR TERMS—Are strictly cash with order. We prefer not to send C. O. D., but if wanted by that method, customers should enclose $\frac{1}{4}$ of the amount in remittance with order.

HOW TO SEND MONEY—This can be done either in the form of a Postal Money Order, Bank Draft, Express Order, Registered Letter, or Cash may be sent by Express. Remittances sent in any other way are entirely at the sender's risk. Small amount may be sent in postage stamps—5, 10, 15, 25c—stamps preferred.

The parcel post applies to seed. **Postal rates are as follows.** Owing to the convenience of having mail brought to your door by the rural delivery system, it is well to take advantage of the low rates.

20 pounds anywhere within the city limits of Los Angeles for 15c.

20 pounds one hundred and fifty miles 24c, and 1c for each additional pound up to 50 pounds.

Nothing heavier than 20 pounds may be mailed farther than 150 miles in one package.

WEIGHT	Miles	150	300	600	1000	1400	1800	Farther
	Local	Zone 1 & 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8
1 pound..	\$0 05	\$0 05	\$0 06	\$0 07	\$0 08	\$0 09	\$0 11	\$0 12
2 pounds..	06	06	08	11	14	17	21	24
3 pounds..	06	07	10	15	20	25	31	36
4 pounds..	07	08	12	19	26	33	41	48
5 pounds..	07	09	14	23	32	41	51	60
6 pounds..	08	10	16	27	38	49	61	72
7 pounds..	08	11	18	31	44	57	71	84
8 pounds..	09	12	20	35	50	65	81	96
9 pounds..	09	13	22	39	56	73	91	1 08
10 pounds..	10	14	24	43	62	81	1 01	1 20
11 pounds..	10	15	26	47	68	89	1 11	1 32
12 pounds..	11	16	28	51	74	97	1 21	1 44
13 pounds..	11	17	30	55	80	1 05	1 31	1 56
14 pounds..	12	18	32	59	86	1 13	1 41	1 68
15 pounds..	12	19	34	63	92	1 21	1 51	1 80
16 pounds..	13	20	36	67	98	1 29	1 61	1 92
17 pounds..	13	21	38	71	1 04	1 37	1 71	2 04
18 pounds..	14	22	40	75	1 10	1 45	1 81	2 16
19 pounds..	14	23	42	79	1 16	1 53	1 91	2 28
20 pounds..	15	24	44	83	1 22	1 61	2 01	2 40

When it is required that postage be added to the purchase price of any commodity, note the distance you are from Los Angeles, see in which zone you live. It is then easy to estimate the exact amount of postage required.

Where it is just as convenient to have seeds reach you by express, please say so. We prefer to send them by that method, as it is safer and often cheaper.

H. L. Musser, Pres.

E. A. Aggler, Vice-Pres. and Mgr.

W. B. Early, Sec'y and Treas.

THE TWENTY-SECOND ANNUAL CATALOGUE OF THE

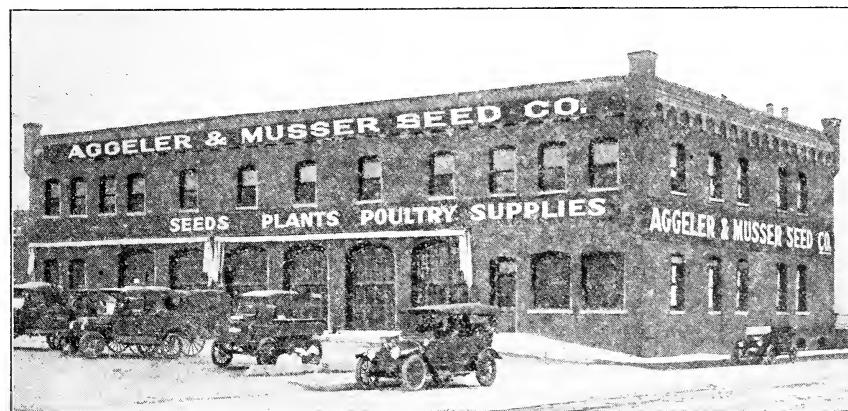
Aggeler & Musser Seed Company

ESTABLISHED 1893—INCORPORATED 1896

At the time of our incorporation our floor space of twenty by forty feet afforded ample room in which to do all the business at our command. Our growth has been steady but always increasing, until now more than 25,000 square feet is required to accommodate our wholesale business at Sixth and Alameda Streets, and more than 10,000 square feet is occupied by our branch at the old stand, 113 and 115 N. Main St., which place we have occupied since we started in business in 1893.



Our Branch Store at 113-115 North Main St.



Our wholesale and mail order department and main office are at Sixth and Alameda Sts. This building with basement is 120 ft. by 90 ft., having a railroad track at the rear and a private street in front.

We have annually more than one thousand acres growing in seeds for us in Southern California under our supervision, yet the acreage for growing our seeds is scattered to every quarter of the earth, as experience has taught us where the best seeds grow. We find that the seeds that produce the best results here are the certain strains of various kinds that have originated and acclimated right here in Southern California, discovered and introduced by us.

We request all newcomers who contemplate putting in a garden, whether for private use or for market, to consult us concerning the selection of seeds, preparation of the soil, fertilization, irrigation, preparing and marketing the produce.

Always Up to Date. The rapid growth of our business each year is conclusive evidence that our seeds are giving satisfaction, that the care we exercise, to guide new settlers in their selection of the proper varieties of seed suited to the soil, the season, and to the purpose or market for which each crop is intended, all prove our sincerity of purpose to help the grower, be he rancher or gardener, in the proper selection of seeds.

We are strictly a market gardener's seed house in every sense of the word. Our practical experience in growing and marketing enables us to give proper directions and advice to new and inexperienced growers in every phase of the profession, from the selection of the seed to the marketing of the crop.

On the front pages of this catalog we will give special mention and description of the most profitable varieties to plant, according to the market for which they are intended. Special mention will also be given to a number of new vegetables of exceptional merit.

With your first order ask for our Garden Manual, prepared especially for the family gardener and the school children of the Great Southwest.

SOME VALUABLE INTRODUCTIONS OF NATIONAL IMPORTANCE WE ARE PROUD OF BECAUSE THEY HAVE ADDED MILLIONS OF DOLLARS TO THE BENEFIT OF CALIFORNIA GROWERS AND TO MIDDLEMEN FROM THE PACIFIC TO THE ATLANTIC, AND MUCH PLEASURE TO THE ULTIMATE CONSUMER.

We introduced the California Pearl Cauliflower in 1900. Prior to that time California Cauliflower was unnoticed in the Eastern market, but since the California Pearl is being shipped in car lots arriving at eastern points in perfect condition, Southern growers cannot compete in quality. Hence California growers are now shipping thousands of carloads, owing to the Pearl variety.

We introduced the White Rose Potato in 1901. The White Rose has superseded other varieties in Southern California, because of its earliness and enormous yield of a large average size potato. It has added greatly to the receipts of the potato grower in Southern California. All of the early shipments to eastern states are of this variety.

We introduced the Hybrid and Golden Beauty Casabas in 1902 and 1908. These with years of competition with other varieties are today the money-makers. More than \$100,000 worth of Golden Beauties alone are shipped outside of the state. The value of the two varieties grown within the state amounts to fully \$1,000,000.

We introduced the New York Lettuce in 1902. Prior to the introduction of this variety very little lettuce was shipped outside of the state, and a carload shipment was unheard of. Now the car lot shipments to all parts of the far east run into thousands, requiring thousands of acres to grow it.

We introduced the Anaheim Chili and Pimiento Pepper in 1904 and 1910. Owing to the introduction of these two peppers, thousands of acres are grown annually. A number of canneries use these peppers exclusively, giving employment to more than one thousand people during the season. The value of this crop to the growers exceeds one million dollars.

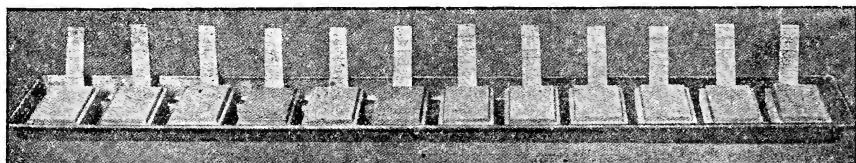
We introduced Chilian and Angelino Watermelon in 1900 and 1907. These are now the leading watermelons grown for the early shippers, and together with the Klondike, they are the best for local consumption, because of their excellent flavor.

The A. & M. First Early Tomato ranks with the foregoing in importance and value because of earliness for shipping and enormous production.

SOME VEGETABLES OF GREAT MERIT NOT YET APPRECIATED BY THE GROWER OR CONSUMER, BUT SURE TO BECOME POPULAR AND OF GREAT VALUE. The market gardeners who will first build up a trade on these items will add greatly to their income. We also give them special recommendation for home gardens:

MONSTROUS LIMA BEAN, WHITE SEEDED KENTUCKY WONDER BEAN, KENTUCKY WONDER WAX BEAN, SCOTT'S CROSS CABBAGE, CHINESE CABBAGE, LEMON CUCUMBER, RULE'S CHOICE, or ARMENIAN MUSKMELON, YELLOW FLESHED COLUMBUS MUSKMELON, PIIMENTO PEPPER, ALL SEASONS RADISH, ITALIAN SQUASH and THE HOME TOMATO.

Every home garden should have these vegetables. See description.



We test the germination of all seeds.

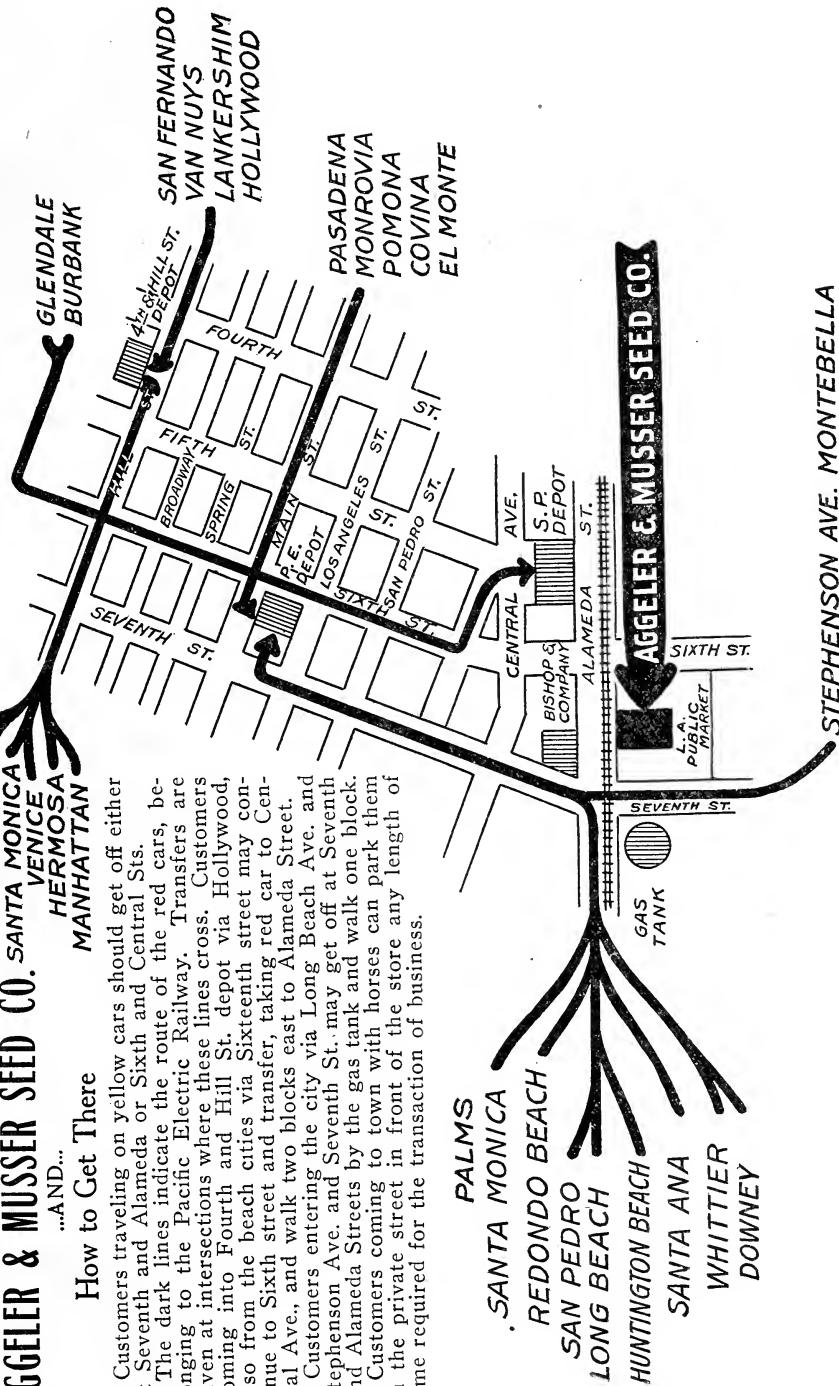
AGGELER & MUSSER SEED CO.

PALMS
SANTA MONICA
HERMOSA
MANHATTAN
...AND...
PALMS
SAWTELLE
VENICE
BRENTWOOD
MANHATTAN

How to Get There

Customers traveling on yellow cars should get off either at Seventh and Alameda or Sixth and Central Sts.

The dark lines indicate the route of the red cars, belonging to the Pacific Electric Railway. Transfers are given at intersections where these lines cross. Customers coming into Fourth and Hill St. depot via Hollywood, also from the beach cities via Sixteenth street may continue to Sixth street and transfer, taking red car to Central Ave., and walk two blocks east to Alameda Street. Customers entering the city via Long Beach Ave. and Stephenson Ave. and Seventh St. may get off at Seventh and Alameda Streets by the gas tank and walk one block. Customers coming to town with horses can park them in the private street in front of the store any length of time required for the transaction of business.



PLANT DEPARTMENT

Owing to our lack of facilities for handling a full line of nursery stock, we have decided to devote this department to the introduction of new fruits, berries and novelties that have proven of special merit and profit to the grower. We feel that by exercising every effort, regardless of expense, in obtaining new creations from different parts of the globe and offering only the things of exceptional merit, we will best serve our patrons.

SUB-TROPICAL PLANTS AND TREES

The increasing demand for Sub-tropicals has led us to make a special arrangement with the largest growers of this stock, for a sufficient supply of their best plants for our trade. These will be shipped fresh and direct from their nurseries, and will be especially choice specimens.

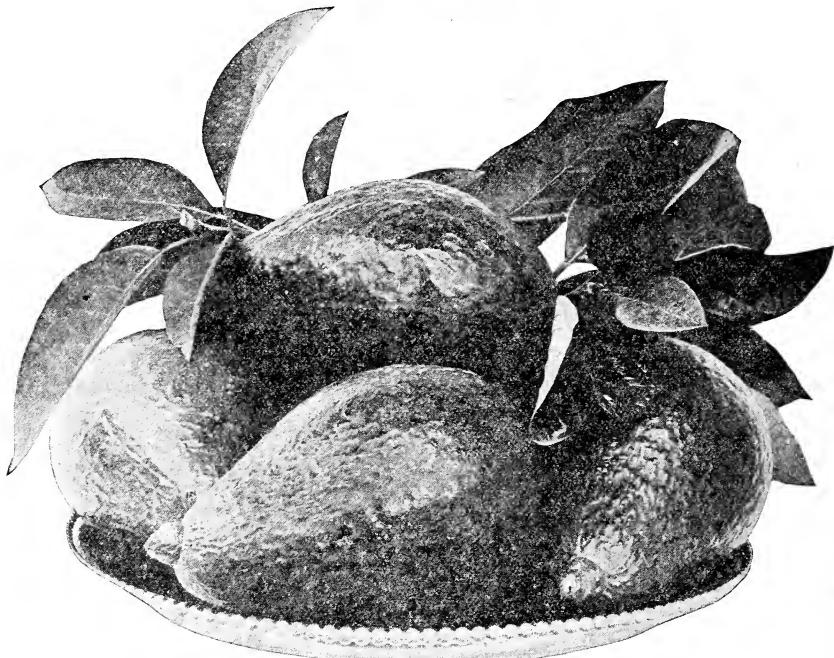
All plants that must be delivered through any transportation company, we deliver to such company at Los Angeles. The purchaser pays the transportation charges.

"The Art of Propagation"

We have had numerous inquiries for a small book of instructions in propagation, budding, etc. We have procured just what every beginner wants.

Price—30c postpaid.

THE AVOCADO



The Taft Avocado

In Southern California from Santa Barbara southward, fruiting avocado trees ranging in age from 3 to 30 years are to be found in quite large numbers. These afford a practical and acceptable demonstration of the adaptability of the tree to this climate and soil, and of its fruitful character. As to food value, it is not stating the matter too strongly to say that it takes first rank among the wonderful and varied productions of Southern California.

The thin skinned, small fruits of the Mexican type are particularly rich and nutty, and are ideal for home use. One variety of this sort recently analyzed by the University of California was found to contain 29% of oil. These are especially hardy, also. The best varieties are:

Northrop. A purple fruit of oval form weighing 6 or 8 ozs., very rich and nutty, prolific, and perhaps the most hardy of all; ripens in October.

San Sebastian. Oval, black, medium to large in size, flesh a rich yellow, tree very hardy, season April and May,—a fine variety.

Harman. Green, pear shaped, of good quality, seed slightly loose in cavity, a prolific and early bearer. Season, late fall.

AVOCADO—(Continued)

Ganter. Another green colored fruit, ripening in the fall. Tree a vigorous grower, an early bearer and prolific. Fruits weigh 8 to 10 ozs., of good quality.

The large fruited Guatemalan types fall a few points below the above in oil content, but are the sorts best suited to commercial use, having a thick, strong skin adapted to long distance shipments. These fruits command a high price in the markets, and always will. We offer the leading varieties.

Taft. As in the past, we rate the Taft as the leader. The tree has uniformly proven a strong, vigorous grower. The fruit is pear shaped, weighs about a pound, quality good, green skin; has a long season, lasting from May to September.

El Fuerte. This variety has proven one of the hardest of the large fruiting kinds. Form, oval; color, green; flesh, yellow and buttery; season, late fall; weight, $\frac{3}{4}$ lb. or more.

Meserve. An almost round fruit, skin green, flesh rich and of good flavor, weight about 1 lb., spring ripening.

Prices—All varieties. Healthy, vigorous trees, balled or in large cans, by express or freight, \$4 each f. o. b. Los Angeles.

WHITE SAPOTE

Introduced to California by the early Mexican settlers. It is hardier than many semi-tropical fruits. The tree forms a beautiful crown, and is very ornamental. The fruit is similar in appearance to the quince. The skin is thin and surrounds a quantity of soft, melting pulp, sweet, and of a flavor almost impossible of description, since it resembles no other cultivated fruit. Our stock is of choicest quality.

Plants 2 to 3 feet high, 75c each.



Feijoa—Natural Size

FEIJOA SELLOWIANA

A relative of the common guava, but very much superior to it. The fruits, which mature in December, are delicious, and a few of them will perfume a room with a pleasing fragrance. Is especially hardy, stands frost down to 10 degrees above zero. The flower is sufficiently beautiful so that the Feijoa is properly classed as an ornamental shrub also. In groups or as a hedge it is very desirable. It is well worthy of commercial planting.

Our stock is the choicest procurable. Fine, field grown plants, two feet high or over, \$1.50.

THE GUAVA

Besides the popular Strawberry Guava (*Psidium Cattleyanum*) found in almost every garden in Southern California, other species of this highly esteemed tropical fruit are well adapted to our climate. Some of these are so valuable as to warrant extensive use. Only those who have eaten the guava jelly of the tropics know how vastly superior it is to that from the strawberry guava.

Psidium guayaba

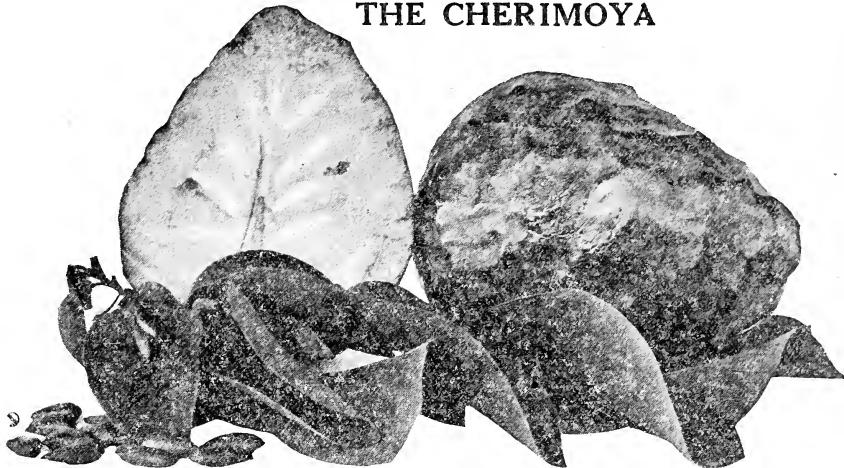
Tropical America—the common guava of the tropics. Variation from seed has led to the existence of many different forms, which have been given little systematic attention as yet.

***Psidium lucidum* (syn. *P. chinense*)**

Brazil—Yellow strawberry guava. It is identical with the strawberry guava, except in the color of its fruit, which is bright yellow instead of red. It is considered by some to be of finer flavor than the last named, and it is also as hardy.

Price—Large plants in 4-inch pots, 50c.

THE CHERIMOYA



The Cherimoya (*Anona Cherimolia*) has been classed as one of the three finest fruits in the world. Forty years of cultivation in California have shown it to be eminently adapted to this climate, which is, indeed, not unlike that of its native home, the highlands of Central America. The tree is a handsome one, with broad, velvety, bright green leaves, frequently deciduous during the winter months. It is sufficiently hardy to be grown wherever the orange thrives.

The fruit is heart shaped or oval, green or brown in color, and ordinarily about the size of a navel orange. The flavor of the pulp is similar to the pineapple, and is liked by everyone. As a dessert fruit the Cherimoya, when grown in a climate such as that of California, is without a superior. It ripens during the spring months.

Our stock is grown from large, delicious fruits from hardy and productive trees selected in the Mexican highlands. We have the finest stock ever offered in California. Price in 6 inch pots, \$1.00 each f. o. b. Los Angeles.

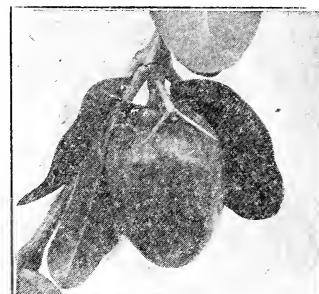
THE NATAL PLUM

A South African shrub (*Carissa grandiflora*), worthy of cultivation in every California garden for its ornamental value as well as for its fruit.

The plant, which does not grow over a few feet in height, is a solid mass of foliage and very shapely. In spring and summer it bears a profusion of white, star shaped flowers of an inch and a half in diameter, which have the fragrance of the tuberose. The flowers are followed by bright scarlet fruits about the size and shape of a plum. These are of a peculiar acid flavor, and are used for preparation of jelly.

The Natal Plum is particularly recommended as a hedge plant. It is hardy, remarkably tolerant of abuse, and thrives with almost no attention. The thorns with which the shrub is supplied make the hedge practically impenetrable, and it has the added advantage of exceptional beauty of foliage and flower, and production of fruit.

Large plants, in 4 inch pots, 50c each f. o. b. Los Angeles.



THE QUEENSLAND NUT

The Australian tree, (*Macadamia ternifolia*) is, from several points of view, one of the most valuable additions that has been made to California horticulture. Aside from the value of its fruit, the tree is a highly desirable ornamental one for the lawn or dooryard, as well as for streets and avenues, for which purposes its drought-resisting qualities make it particularly desirable. It is an evergreen, with dark green, serrated leaves greatly resembling those of the holly.

The nuts are abundantly produced in clusters of from three to fourteen, enclosed by a hull similar to that of the hickory nut. They are round, smooth, light brown in color and about an inch in diameter. The shell is thick, and encloses a round kernel, similar to the filbert, but larger. The flavor is like that of the Brazil nut, but greatly superior to it. Price of two-year-old trees in 6-inch pots, 2 feet or more, fine specimens, \$1.50 each f. o. b. Los Angeles.

PASSIFLORA EDULIS**Passion Vine**

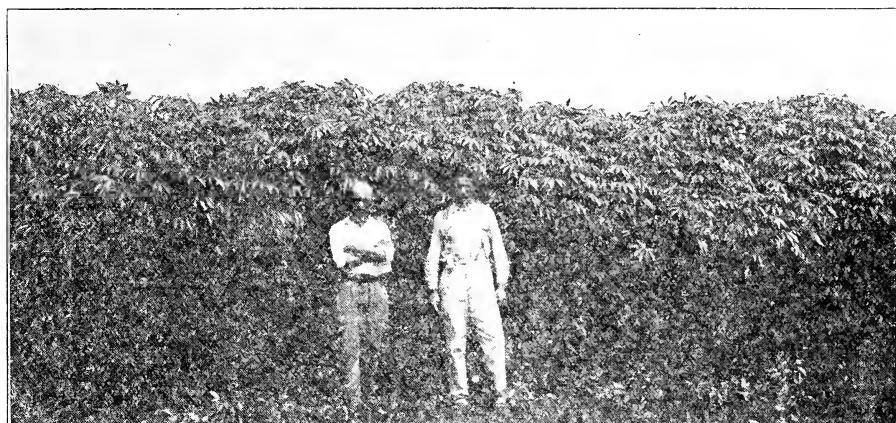
The Passion Vine thrives in California. It is not yet well known, however, and hence its fruit has not come into general use. In Australia it is extensively grown.

The fruit is the size of an egg, and contains a pulp of exceedingly good flavor. It is consumed much in the same manner as an egg,—that is, by cutting off one end and removing the contents with a spoon. The pulp is also used as a flavoring for cakes, ice-creams, drinks and sweet-meats, and is a much appreciated addition to fruit salads. It packs and ships well.

The vine is a vigorous grower, and well suited to use on trellis or screen frames. It is quite hardy.

Price, large plants in 4-inch pots, 50c each. Seeds, per pkt., 25c.

Fruiting Passion Vine

**CASAVA**

Casava

In growth and culture the casava is similar to the dahlia. It grows six to ten feet tall, yielding large tuberous roots, from which tapioca is made. These roots are excellent food for hogs, and cattle, and is greatly relished by them. It is destroyed by frost, therefore the stalks are cut in the fall, all leaves and tender growth cut away. The stems are then stored for spring planting by being buried in sand. About April 1st they are rooted and ready for planting. Cut into pieces three inches long, and plant in moist sandy loam four feet apart in rows six feet apart. Water and cultivate freely. As the roots grow to large size they may be removed without injury to the plant. In this way the yield is enormous.

We recommend this plant highly for cattle and hog feed to all who have suitable soil and sufficient water. We offer good live canes in pieces of three inches at 10c each; 15 pieces for \$1.00 prepaid. Plant in March; may be harvested any time during the fall and winter.

MEXICAN FIRE BUSH

This wonderful plant grows two or three feet high. Each alternate year it sends forth spikes of firey red flowers similar to but much larger than Salvia (scarlet sage). The dazzling brilliancy of the flowers is very attractive.

The alternate year when not blooming the plant is quite ornamental; has shrubby growing about three feet high with ivy-shaped leaves of light green color. Price, per pkt., 10c. Bulbs, each, 15c.

The Dasheen or Chinese potato has been cultivated in China and Japan for centuries, and it is said there are more of these tubers eaten than of the Irish potato. It is related to the ordinary caladium or elephant's ear, which it resembles in habit of growth, and is both ornamental, interesting and useful. It develops tubers in the ground which are cooked similarly to a potato and have much the potato's texture and flavor. When boiled they have a chestnut flavor.

The dasheen can be prepared in many ways but they are generally liked best when parboiled for about 15 minutes and the cooking completed by baking in a fairly quick oven. Depending upon the size, they should be baked from one to two hours, a fork being used to test them.

As soon as done the corms should be cut open lengthwise, covered with a napkin, in a warm dish, and served immediately. If they have been cut open before cooking, the thin crust formed over the cut surface should at once be lifted, on taking from the oven. (This crust is itself very palatable.) The mealy interior can be taken out easily with a fork or spoon. Baked dasheens are generally drier than baked potatoes and therefore need more butter. Salt is used in seasoning.

There is no better food for hogs than dasheen. They will yield more abundantly than potatoes and can be stored and handled in the same manner.

Plant 2 to 3 inches deep, 3 feet apart in rows 4 feet apart, in rich sandy soil, moist, but well drained. The plant grows to a height of 5 to 6 feet. The crop matures in about seven months. Cultivate the same as potatoes.

DASHEEN



Dasheen



Helianti

lemon artichoke, but as a table vegetable it ranks much higher, being tender and palatable, more easily digested than potatoes, and remarkably free from starch. For the table the tubers are more desirable than artichoke; shaped as portrayed in the picture and scarcely larger than your thumb. May be cooked in many ways, like potatoes, asparagus, cauliflower, oyster plant, squash, etc. The green stalks are fine food for cattle and may be cut repeatedly during the growing season. Helianti will give great satisfaction both as a flower and vegetable.

Helianti Pink-Tubered—Flowers golden yellow, large and fine, in dense masses, fully as showy as Rudbeckia Golden Glow. It begins to bloom August 1st.

Price, (1 tuber 10c), (4-25c), (12-50c), prepaid. Seed, per pkt. 20c.

HELIANTI

This new hybrid plant is of the Sunflower Artichoke family, producing showy golden yellow flowers like Cosmos blossoms in endless profusion, and immense quantities of fleshy tubers, that are splendid eating fall, winter and spring. It will thrive anywhere in any soil or climate, and as a flower it is very showy.

Culture—Plant tubers in spring or fall three feet apart each way in rows and hill up the same as potatoes. Harvest the tubers during fall, winter or spring as needed.

As a Flowering Plant—It is probably more valuable as a flower than as a vegetable. During August and September it is certainly wonderful and hardly excelled by our famous Rudbeckia Golden Glow.

Food Value—As a hog or cattle food Helianti is equal to the Jerusalem artichoke, but as a table vegetable it ranks much higher, being tender and palatable, more easily digested than potatoes, and remarkably free from starch. For the table the tubers are more desirable than artichoke; shaped as portrayed in the picture and scarcely larger than your thumb. May be cooked in many ways, like potatoes, asparagus, cauliflower, oyster plant, squash, etc. The green stalks are fine food for cattle and may be cut repeatedly during the growing season. Helianti will give great satisfaction both as a flower and vegetable.

CACTUS

(If interested, write for particular information and price on large quantity.)

We have devoted five years to a careful observation of cactus-growing, with the conclusion that about three varieties represent the best. Probably as many as twenty varieties are commonly offered. Some of these varieties are nearly or wholly synonymous.

Culture—Plant during the summer months from April 1st to November. Allow the blades to wilt before planting. Use the whole blade, planting one-third the length under ground. Set blades four feet apart in rows seven feet apart. Apply very little water on dry soil, none on moist soil. Plant on any soil, from the poorest sandy river bed to rocky mountain side to the richest sandy loam or adobe, anywhere except on swamp or overflow land. Rich soil and cultivation will greatly increase its productiveness but it will thrive abundantly without the least attention or care. Fifty tons of fruit and two hundred tons of forage is not an unreasonable estimate for an acre four years old.

For the dairy or hog ranch the value of cactus cannot be over-estimated.

It assuredly increases the quantity of milk when fed to cows.

If you have a piece of waste land, plant it to Thornless Cactus. During a dry season when fodder is scarce you can rely upon the cactus. A few plants in a home garden will prove desirable for the fruit, which is considered very good.

Anacantha is one that we have selected first because of its hardiness, second because it is enormously productive of blades and fruit. The blades are soft and easily eaten by stock; it has no thorns; few spines on the blades, but no bristles. Most other varieties have bristles. We recommend this variety for planting on large ranges. It is a good variety to plant in a small way for poultry and for fruit. The fruit is large and of good flavor. Seeds are small.

Price—50c per blade, postpaid.

Robusta is recommended because of its hardiness, prolific, large fleshy blades and fruit, and is free from small spines in the pores, and practically free from bristles on the blades. **Price**—(Per blade, 60c, postpaid).

Meyers—This variety we recommend above all others. It is absolutely free from thorns, spines, or bristles. Can be handled without gloves. The blades are medium soft and readily eaten by stock.

Price—(60c per blade).

GINSENG, THE GOLD WINNER

Send 50c for Kain's Book on Ginseng Culture.

Ginseng will grow anywhere with proper soil, shade and moisture. In Southern California it has succeeded under the shade of the willows along the San Gabriel River, but we recommend that it be planted on the north side of mountain ranges where natural moisture may be found, and along mountain streams. It is not difficult to grow when once established in a congenial place. No other crop promises so large returns for so little expenditure.

One thousand fresh seeds for \$4.00 will in three years reproduce seed, and in five years the roots will be marketable at the rate of \$30,000 per acre.

One thousand stratified seeds (seeds that have been sprouting for one year) costing \$8.00, will attain the above results in one year less time.

One hundred one-year-old roots costing \$10.00, will in one year produce seed and be ready for marketing in three years. If you are favorably located for the culture of ginseng be sure to try it. Write for quantity price.

GOLD SEAL

What has been said of the culture of ginseng applies also to Gold Seal, except that results are attained within three years instead of five.

Gold Seal has real medical value and is used extensively. Heretofore the supply was obtained from the mountaineers of the Eastern states, where it grows wild, but this natural supply is being exhausted, and the medical world offers encouragement to grow it artificially. This is being accomplished by the same growers who are now succeeding with ginseng.

All our plants are from the wild, therefore superior to cultivated stock and free from disease.

Price—(50 plants, \$5.00) (100 plants, \$9.00).



BERRIES



This picture plainly shows an easy way to make a trellis upon which to train all berries that have trailing vines. By this method cultivation is made easy, and by keeping the vine trimmed and trained closely to the trellis, picking is easy and convenient.

Drive stakes sixteen feet apart along the berry rows. Nail cross pieces on top of the stakes, and stretch wire somewhat heavier than baling wire along the row on each side of the stake, and attach with staples to each end of the cross pieces.

All berry plants here listed are ready for delivery from January 1st until April 15th, except strawberries, which are ready for market from October 1st until April 1st.

- For Dewberries, the stakes should be 2 ft. high, cross pieces 20 in. long.
- For Loganberries, the stakes should be 2½ ft. high, cross pieces 24 in. long.
- For Phenomenal, the stakes should be 3 ft. high, cross pieces 24 in. long.
- For Mammoth Blackberries, the stakes should be 4 ft. high, cross pieces 24 in. long.
- For Black Cap Raspberries, the stakes should be 4 ft. high, cross pieces 20 in. long.
- For Himalaya Blackberries, the stakes should be 5 ft. high, cross pieces 30 in. long.

LOGANBERRIES

Loganberries are very similar to Phenomenal berries in appearance. See front cover page.

This berry is largely used for pies, for canning, and making preserves. It has the appearance of a large raspberry and the blended flavor of raspberry and dewberry. It is so prolific that a single vine will often bear 100 boxes of berries. For a home garden a few vines trellised along a fence will be sufficient, but for commercial planting set the plants five feet apart in rows six feet apart.

Price—(Each 5c), (1 doz. 60c prepaid), (100 \$4.00).

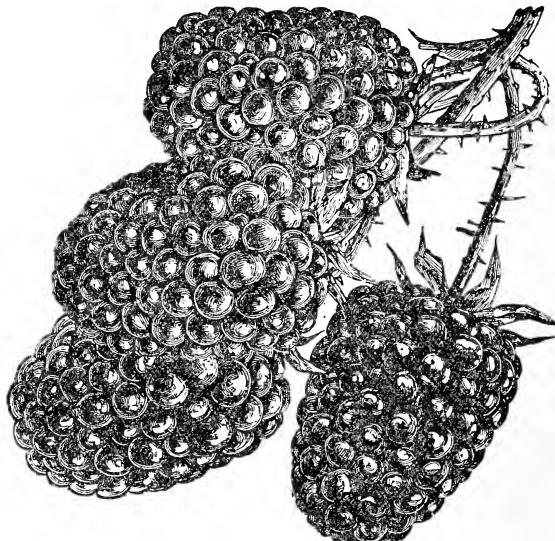
MAMMOTH BLACKBERRY

It is all that its name implies, both as to cane and fruit. A single plant has been known to have as much as 175 feet of bearing cane and will cover the side of an ordinary sized dwelling. The canes start growth early in the spring and after reaching a height of six or seven feet take the trailing habit and should be trellised. They make a prodigious growth and have luxuriant foliage. The canes can be pruned to suit.

In size of fruit no other blackberry approaches it. Berries are frequently found measuring 2½ inches long. For cooking purposes the fruit fulfills all the desired qualities of other blackberries, and as a fresh fruit is generally preferable, owing to large size and having more pulp and less core.

Price (10c each) (\$1.00 per dozen prepaid) (\$6.00 per 100).

We aim to have only strong, healthy plants and true to name. We have received only few complaints, all of which have been due to delays in transit.



Mammoth Blackberry

PHENOMENAL BERRY

(See picture on first page of cover showing actual size of the berry.)

This has been said by Mr. Burbank to be "The best berry in the world." In its place it certainly is unique, being the result of a cross between a Dewberry and the Cuthbert Raspberry, taking the size and shape of the former and the color and flavor of the latter.

The vines are similar to the Loganberry and should receive the same training and cultivation. Berries grow in clusters of from 5 to 10 or more, and for size there is no berry of its kind approaching it. Individual berries often measure 3x4 inches in circumference. Bright crimson in color and rather tart in flavor, they are excellent for jams, jellies, etc.

Prices—(10c each) (\$1.00 per dozen prepaid) (\$6.00 per 100).

HIMALAYA BLACKBERRY

This is enormously productive, bearing from June until frost.

In field planting, the vines should be given plenty of room; ten feet apart each way is not too much, as the canes make a prodigious growth if allowed. Strong wire trellises should be provided on which not more than four canes from each plant should be trained.

These canes after reaching the desired length should be pinched at the tips, causing the surplus energies of the vine to go into fruit.

Prices—(10c each) (\$1.00 per dozen prepaid) (\$6.00 per 100).

GARDENA DEWBERRY

Dewberries grow wild in many localities. Some varieties have been domesticated and improved. Among these is the Gardena which wins favor wherever tried. The vine is a low rambler and should not be trained up over twenty-six inches high for best results. Early in the Spring the vines are covered with a mass of bloom, later yielding an immense crop of large, lustrous, blue black berries, very sweet.

Price—(Each 5c) (doz. 50c prepaid) (100 \$4.00).

RASPBERRIES

Raspberries succeed best in a rich, mellow soil. They should be planted four feet apart in rows five or six feet apart. They are easily cultivated, only requiring manuring and cutting out of dead wood and suckers. Old canes should be removed after bearing season is over.

ST. REGIS EVERBEARING

Raspberries for four months—that's what you get when you plant St. Regis—the new everbearing variety.

This variety has been aptly termed "the early till late" variety; for it is the first red raspberry to give ripe fruit, while it continues to produce berries without intermission until late in October.

Unlike any other raspberry, the St. Regis yields a crop of fruit the first season. Planted in early April, ripens berries early in June of the same year. For four weeks thereafter the yield is heavy, and the canes continue to produce ripe fruit freely without intermission until the middle of October.

Price—(By mail 10c each) (\$1.00 per dozen) (100 plants \$7.00) prepaid.

CUTHBERT RASPBERRY

Nearly everyone knows about this excellent berry. Where favored with moist ocean breezes the large red fruit is unsurpassed.

Price—(Each 5c) (doz. 50c) (100 \$4.00). Prepaid.

SURPRISE RASPBERRY

This berry is very similar in appearance to the Superlative. It is the earliest red raspberry on the market and has a long fruiting season. The roots produce an abundance of bushy canes, immense clusters of berries on every lateral. The Surprise is practically an ever-bearer in warm climates and raspberries at Christmas time yield a handsome profit. This variety is especially recommended for warm and hot locations where other varieties are subjected to sunburn.

Price—(Each 15c) (doz. \$1.00) (100 \$10.00).

KING OF THE CLIFFS EVERBEARING

This is truly a wonderful raspberry, actually bears fruit from May until December.

The earliest of all black raspberries. This new raspberry was first discovered in the spring of 1905, growing in and around a cliff of rocks. Berries firm, yet glossy black and a delicious flavor; seeds very small, berry compact and uniform large size. Canes of ironclad hardness, enduring the severest cold uninjured, and are wonderfully prolific. Unlike many other varieties, its foliage never suffers by blight or its cane never attacked by Anthracnose or any other disease, nor its cane impaired by the heat or drouth of summer.

Price—(15c each) (12 plants \$1.50) (50 plants \$4.00) postpaid.

If you are interested in the culture of raspberries we suggest that you write the United States Department of Agriculture for Farmers' Bulletin No. 213.

STRAWBERRIES



One Year from Transplanting. 12 inches apart in rows 3 feet apart.

Pursuant to our custom of offering each year something new and out of the ordinary, we are now offering the family of **Everbearing Strawberries**.

They come to us from eastern growers who give them the highest recommendation for early, continuous and late bearing, enormously productive of large delicious berries, very hardy and set runners freely. All of these **Everbearing** varieties have perfect blossoms.

The above description applies to all. We therefore suggest that for experimental purposes you try at least one dozen of each variety.

Price prepaid—Americus, Frances, Superb, Productive: (Doz. \$1.00) (25 \$1.50) 100 \$5.00).

Three plants of each variety, \$1.00.

Six plants \$1.50, 25 plants \$5.00, prepaid.

Twenty-five plants of each variety, \$5.00.

The following varieties of Strawberries are the local favorites. Therefore you can make no mistake in planting them. All are good:

Price prepaid—Klondike, Brandywine, A-1, Dollar: (50 40c) (100 60c) (1000 \$4.00).

STRAWBERRIES

Ettersburg No. 80—Something new in the strawberry line ;an entirely new creation bred up from the native California wild strawberries. Of the several varieties Mr. Etter has created, we are offering his No. 80, which we recommend to our readers as one of great merit and promise of exceptional value, because of its large size, delicious flavor, productiveness, hardiness to endure both cold, heat and drought, and it will bear abundantly on soil too poor to produce other varieties. In fact, it is not congenial to rich damp land. Mr. Etter says of it:

"No. 80 is a large solid berry. It is very productive of fine red berries that are of large size and have a large clean cut green calyx or hull. The blossoms are very large and the runners very strong. The plant is extra vigorous and deep rooting and the foliage leathery. In the fall of the year the young foliage is of a bluish cast. The fresh fruit is of fine dessert quality, and for flavor as a canned berry it is the very best, a deliciousness I have found in no other variety. It is red, and red to the center. It is a great canning sort. I regard No. 80 as about the best of all my hybrid strawberries for trial everywhere."

No. 80 was productive by crossing the Rose Ettersburg with the Chilvensis or Beach strawberry from Cape Mendocino, and crossed again with a cross from the Rose Ettersburg and California wild strawberry.

Price—(Doz. \$1.00) (25 \$1.50) (100 \$5.00).

GRAPE VINES

One-year-old rooted cuttings. Price, prepaid—Muscat, Red Emperor, Black Morocco, Rose of Peru, Black Hamburg, Cornichon, Madera, Thompson Seedless, Tokay, Black Muscat: (Each 15c) (dozen \$1.25) (100 \$6.00).

OUR BULB DEPARTMENT

Los Angeles, the city of beautiful lawns, owes much of its popularity to the many flowering bulbs that bloom so perfectly, so profusely and so constantly in this climate, only requiring proper setting at the right time of the year and the right selection to attain the highest perfection of beauty.

The bulbs we offer are chosen with the purpose of giving our customers the best bulbs to get the best results. In order to get the best results, make your selection according to the time of planting, and many of them may be planted at any time in order to have them bloom when you wish.

Although this catalog will come to you when the time for planting Dutch bulbs has nearly passed, we request you to keep this list that you may refer to it next September, when making up your order for fall planting.

Do not order any Dutch bulbs after February 15th.

IMPORTED BULBS

Plant from October until February.

Hyacinths

Early Flowering French Roman Hyacinths

For early forcing in window boxes for inside decoration.

	Each	Doz.	Prepaid
White, Dark Rose and Blue .....	.05	.40	
Extra large single named varieties for forcing in pots.			
Pure white, L'Innocence, Pink, Gertrude, Red, Rol Des Belges, Blue, Grand Maitre .....	.10	1.00	
Popular Mixed Hyacinths for out-door bedding.			
Red, White, Blue and Pink. Single, any color .....	.05	.60	
Double, any color .....	.08	.75	

Tulips

	Each	Doz.
Extra early for forcing.		
Rose Griselin, Single Delicate Pink .....	.05	.50
Kaiser Kroon, Single Scarlet edged with Golden Yellow.....	.05	.50
Murillo, Double Pink .....	.05	.50
Tournesal, Double Red and Yellow .....	.05	.50
Salvator Rose, Double Pink .....	.05	.50
Rex Rubrorum, Scarlet .....	.05	.50

For out-door bedding.

Red, Red and Yellow, White, Pink, and Yellow:			
Single, any color	2 for .05	.25	
Double, any color	3 for .10	.30	

Narcissus

The largest Daffodils in cultivation.	Each	Doz.
Emperor, Pure Yellow .....	.05	.50
Emperor, White and Yellow .....	.05	.50
Victoria Creamy White and Deep Yellow .....	.05	.50
Polanthus Paper White	2 for .05	.25
Chinese Sacred Lily (Imported) .....	.15	1.50

Jonquils

Campernelle Rugulosus, Largest Flowering:			
Pure Yellow, very fragrant.....	3 for .10	.30	

Crocus

Large Yellow	2 for .05	.25
Striped and Variegated	2 for .05	.25

Ranunculus

All colors	2 for .05	.25
All colors	2 for .05	.25

Anemones

All colors	2 for .05	.25
Spanish Iris	3 for .05	.20

All colors	3 for .05	.20
The following list of bulbs may be planted at any time from January until July. Some varieties may be planted at any time throughout the year.		

Each

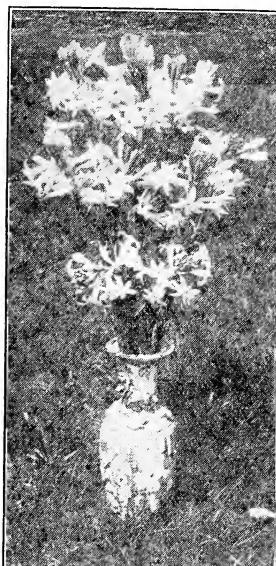
Amaryllis

Belladonna, large lavender flowers, the most beautiful of all Amaryllii. Very large bulbs .....	.25
Johnsonii, Scarlet striped white .....	.15

Caladiums

Elephant Ear, very large bulbs .....	.25	\$2.50
Small bulbs .....	.10	1.00
Dasheen. Edible bulb .....	.10	1.00

	Callas	Each	Prepaid
May be planted at any time.			
White Flowering, large roots	.10	\$1.00	
Small roots	.05	.60	
Yellow, Large sized bulbs	.50	5.00	
Yellow, Medium sized bulbs	.35	3.50	
Yellow, Small sized bulbs	.20	2.00	
Freesias—Refracta Alba	..	.15	
Gladiolus—A. & M. Superb Mixture	.05	.50	
English Iris—Blue or White	.05	.60	
Oxalis—Pink	..	.20	
Watsonii—Mixed Colors	.05	.50	



Mexican Everblooming
Tuberose

Why is this beautiful flowering plant so much neglected? It requires little attention, little watering; it blooms all the year, in sun or in shade, nothing more beautiful for bedding or potting, for hedge or border, for arbor or window boxes. No other plant affords greater variety of flowers, both in type, color and variation of foliage. No other plant is so easily propagated. No other plant grows anywhere in all conditions of soil and climate so luxuriantly as the geranium. Every home in the city or country and every desert home may be surrounded, even buried in the dense cool foliage of the beautiful flowering geranium. Slips will bloom within a month after transplanting.

In order that the planting of geraniums may be encouraged, we are offering slips of various types of geraniums that shall be known by number, as we cannot name all of the varieties we have to offer. Each number is described, that you may order the one best suited to your purpose. Some varieties are very scarce, but we make no variation in price, but if we haven't what you order we will substitute another variety that is of similar description.

Send no order amounting to less than 25c.

Price—(5 slips 25c) (12 slips 50c) (25 slips \$1.00), prepaid.

Mexican Ever-Blooming Tuberoses

They have tall stiff stems, flowers pure white, single, delightfully fragrant. They withstand all winds and weather save hard frosts, commence to bloom in May and continue to December. They never blight and if the stalk is cut when the first bloom appears, the other flowers increase in size and whiteness and keep for a week or ten days. They increase rapidly.

	Each	Doz.
Mexican	.05	.50
Double Pearl	.05	.50

Cannas

Louisiana—Green foliage edged with brown. Flowers large scarlet, one of the finest of the orchid flowering type. Height, 5 feet. Price—5c each; 50c doz.

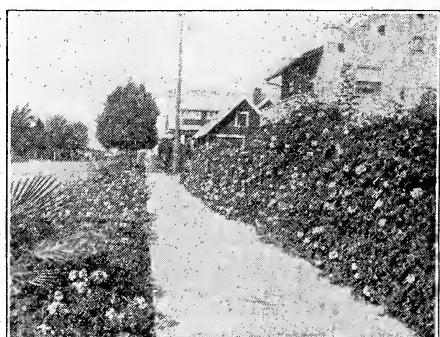
Shenandoah—Bronze foliage, flowers rose pink, forming in large clusters. Height 3 feet. Very pretty for bedding. Price—5c each; 50c doz.

Indiana—Green foliage, flowers very large golden orange, orchid type, height 5 feet. Price—5c each; 50c doz.

Mont Blanc—Green foliage, flowers creamy white. Height 3 feet. Price—5c each; 50c doz.

Pennsylvania—Foliage green, flowers large pure deep scarlet, orchid flowering type. Height 6 feet. Price—5c each; 50c doz.

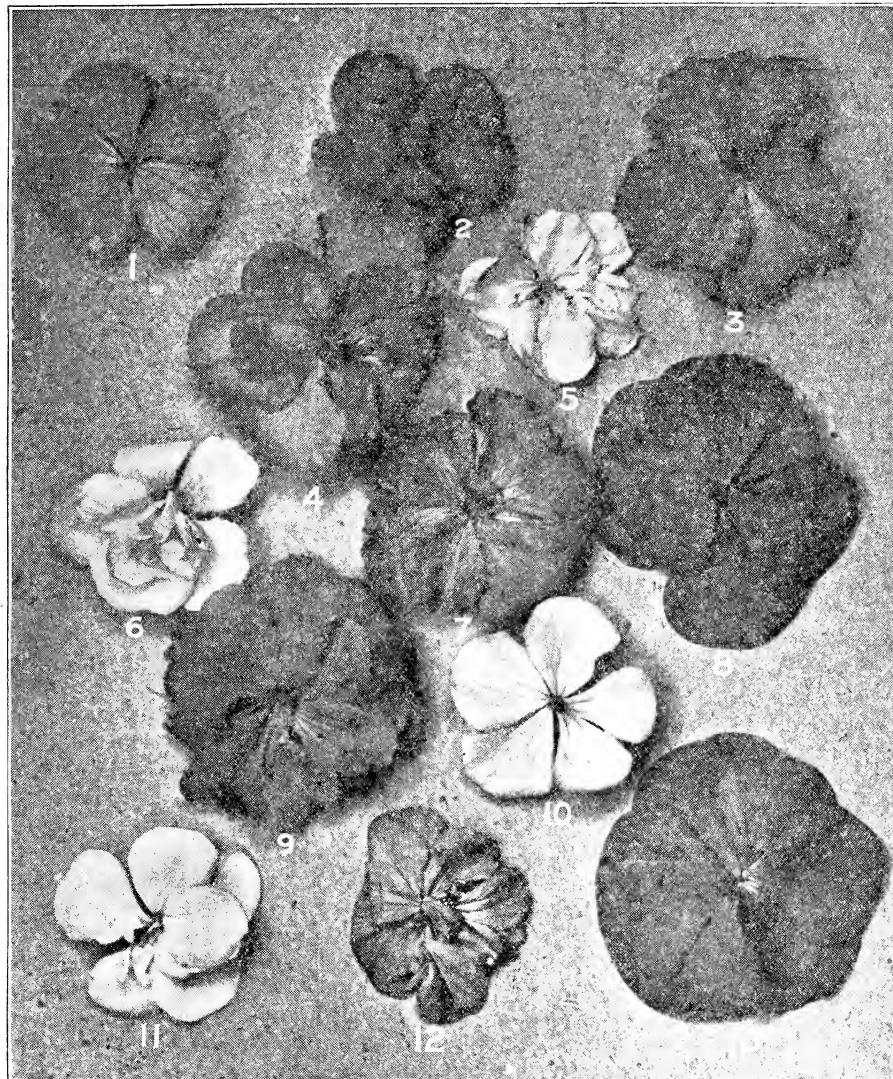
PLANT GERANIUMS



The Ivy Geranium Covering a Board Fence, and Used for Sidewalk Border

GERANIUMS—(Continued)

Great care will be taken to have all slips of good hardy wood. They will be packed in damp moss and mailed the same day they are cut.



No.	Color	Height	Suitable for
1.	Pink	18 inches	Bedding or hedge
2.	Majenta	2 feet	Bedding or hedge
3.	Scarlet	2 feet	Bedding or hedge
4.	Pink	Climby Ivy	Sidewalk, fences, around palms
5.	Pure White	12 inches	Bedding or border
6.	Apple Blossom	12 inches	Bedding or border
7.	Light center to rose edge	18 inches	Bedding, border, or hedge
8.	Dark Red	10 feet	Hedge, arbor, or to cover fences
9.	Red	Climby Ivy	Sidewalk, fences, around palms
10.	Light Pink	2 feet	Hedge
11.	Pure White	12 inches	Bedding or border
12.	Light center to rose edge	18 inches	Bedding or hedge
13.	Bright Scarlet	18 inches	Bedding, hedge or border

DAHLIA BULBS

The dahlia bulbs we are now offering have been selected with great care, as we chose these types from among forty-two that we grew on our trial grounds. We have endeavored to describe each of the twelve dahlias pictured on our cover page, in order that you may be aided in your selection. You may see them pictured in their natural colors at both stores.

Sixth and Alameda, and 115 N. Main Street

No.	Name	Description	Type	Height	Price Each	Prepaid Doz.
1.	Semiramis	Pink suffused with gold	Peony	3 ft.	15c	\$1.50
2.	Beliot	Dark Wine	Decorative	4 ft.	15c	1.50
3.	Queen Emma	Light Pink	Peony	5 ft.	25c	2.50
4.	Herstog Hendrygg	Deep Rose Pink	Peony	4 ft.	15c	1.50
5.	Souvenir de Gustav Duzon	Watermelon Red	Decorative	4 ft.	25c	2.50
6.	Mrs. Geo. Stevenson	Yellow	Cactus	4 ft.	15c	1.50
7.	Rene Cayaux	Brilliant Red	Cactus	3 ft.	25c	2.50
8.	Lady Seville	Neil Rose	Peony	4 ft.	25c	2.50
9.	Schorr Helena	Delicate Pink	Cactus	3 ft.	15c	1.50
10.	Rev. D. A. Williamson	Dark Red	Cactus	4 ft.	15c	1.50
11.	Acrobat	Red and White	Cactus	3 ft.	15c	1.50
12.	Frank Smith	Dark Maroon	Show	4 ft.	15c	1.50

The price per dozen is the same for assorted varieties. All of the above varieties produce flowers from four to six inches in diameter. See back cover page.
The following named varieties are not pictured on the cover page, but are quite as beautiful and vary in size from three to six inches in diameter, and include every color, from pure white to dark maroon.

Name	Color	Type	Size	Height	Price Each	Prepaid Doz.
Mrs. S. Keeling	Pink	Peony	5 in. diam.	4 ft.	15c	\$1.50
Queen Wilhelmina	White	Peony	5 in. diam.	4 ft.	15c	1.50
Wolfgang von Goethe	Salmon Pink	Cactus	4 in. diam.	3 ft.	15c	1.50
Rev. J. M. Jameson	Pink	Cactus	4 in. diam.	3 ft.	15c	1.50
Mary Purrier	Scarlet	Cactus	4 in. diam.	3 ft.	15c	1.50
Sandy	Autumn Tint	Cactus	4 in. diam.	3 ft.	15c	1.50
Schwan	Pure White	Cactus	4 in. diam.	4 ft.	15c	1.50
Vater Rhein	Orange	Cactus	4 in. diam.	4 ft.	15c	1.50
Navajo	Dark Maroon	Decorative	5 in. diam.	5 ft.	15c	1.50
Catharine	Yellow	Pompon	2 in. diam.	3 ft.	15c	1.50
San Foi	Red Tipped White	Pompon	2 in. diam.	4 ft.	15c	1.50
Irene	Maroon Tipped White	Pompon	2 in. diam.	4 ft.	15c	1.50
Union Jack	Striped Red and White	Single	3 in. diam.	3 ft.	15c	1.50
Tree Dahlia	Lavender	Single	7 in. diam.	10-12 ft.	75c	...

The Pompons and the Union Jack are very decorative for indoor purposes. The price per dozen is the same for assorted varieties.

THE MONSTROUS BUSH LIMA BEAN

Two crops a year for many years. Originated in Orange County, Cal. Introduced by us in 1907. This picture shows actual size of the bean.

In addition to this we have numerous testimonials to the effect that we have not exaggerated when we claim this to be the largest most prolific, most profitable and best flavored Lima Bean now in existence. Like every other vegetable, it must have proper culture. Plant 6 feet by 6 feet, leaving one stalk in each hill. If convenient, plant in a sheltered place about April 1st. You will then be gathering beans during September and possibly until January, and when frost has destroyed the tender growth, prune as you would a grape vine. Soon new growth will appear and by May 1st you have a new crop as profitable as peppers or string beans or any other early vegetable. During July the vines will show age and become mildewed; prune as before and in October you will begin gathering your third crop. Continue pruning twice a year; irrigate and fertilize.

Price—(pkt. 10c) (1/4 lb. 20c) (1 lb. 50c) (Post-paid) (5 lbs. \$2.00) (100 lbs. \$25.00).

There is nothing more profitable in a city garden than a dozen stalks of this wonderful bean. It is a common occurrence for our city customers to tell us of its great productiveness and excellent flavor.

One home gardener writes us that from one pound of seed planted in 1912 he gathered forty-two pounds of dry beans, besides all the green beans the family could use, and in 1913 he planted five pounds, gathered 180 pounds dry beans, and the vines were then beginning to bear a second crop.

Mr. Conrad Schleider, Estero, Fla., writes: "I have tried your Monstrous Bush Limas for over two years. They do well as long as the dry season lasts. The last time I planted in late December, got a big crop in May, before the rainy season started. The heavy rains and hot sun finished them."

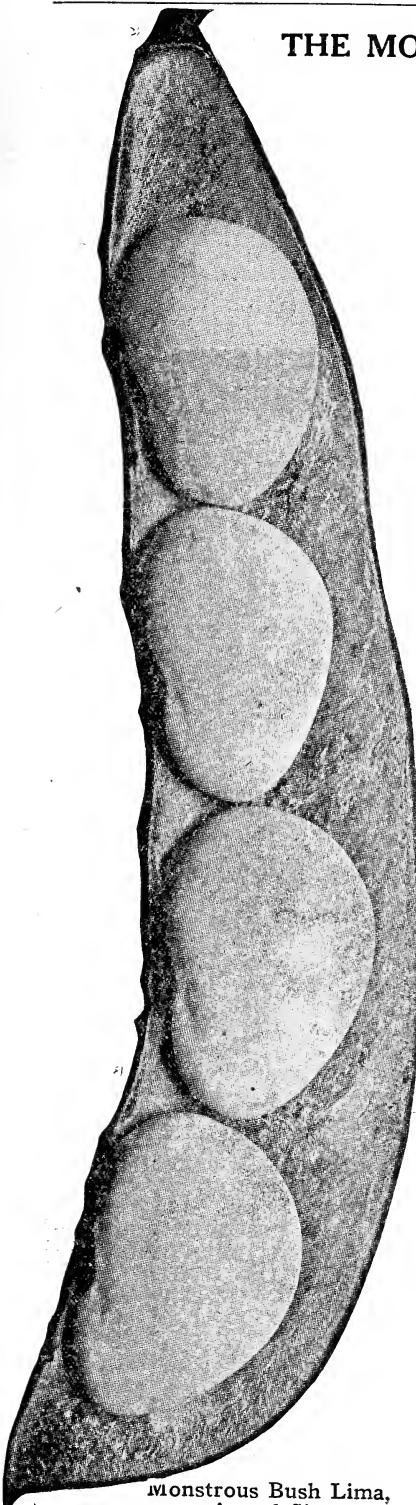
An application of the best grade of powdered sulphur would have prolonged the life of the vines, but they should have been pruned to allow a second growth.

Year after year we have new testimonials portraying the wonders of this wonderful bean. One grower near Redondo now claims to have picked more than seven hundred pods from one vine. Another Redondo grower realized \$260.00 off of $\frac{3}{4}$ of an acre from second crop during June and July, pruned the vines and began picking the third crop early in October.

ALSO A FIELD CROP

Mr. Koch, of Los Angeles, has growing eight acres of Monstrous Limas from which he expects to harvest three hundred sacks of dried beans. He says he harvested last season from one acre sixty sacks. These were gathered by hand and not a bean lost. He thinks it should speedily replace the common Lima both because of the large yield and the superior flavor.

Monstrous Bush Lima,
Actual Size



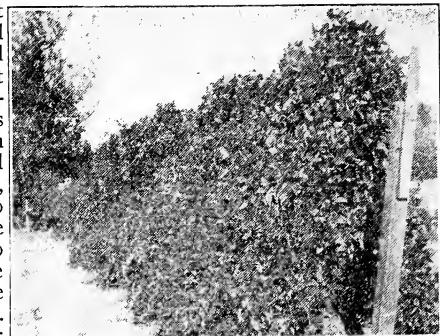
TEPARY BEAN

The Tepary Bean comes down to us from the Aztecs that inhabited the Southwest long before the white man discovered America. The Agricultural Experimental Department has recognized its great merit as a drought resistant bean, and recommended it to be grown on the mesa lands where it is too hot and dry for our common varieties to grow. It is also recommended for a summer cover crop and soil renovator, as it needs no irrigation. It yields thirty to forty sacks of dry beans per acre. The vines should be handled when damp to avoid loss by shelling. The vines are like those of the Lima bean. The beans are like the small white navy, but smaller. However, for table use we give them our hearty endorsement. We have tried them, and believe them better than all others for baked beans.

Price—(pkt. 5c) ($\frac{1}{4}$ lb. 10c) (1 lb. 30c). Prepaid, 25 lbs. or more, 15c per lb. delivered to the freight or express office at Los Angeles.

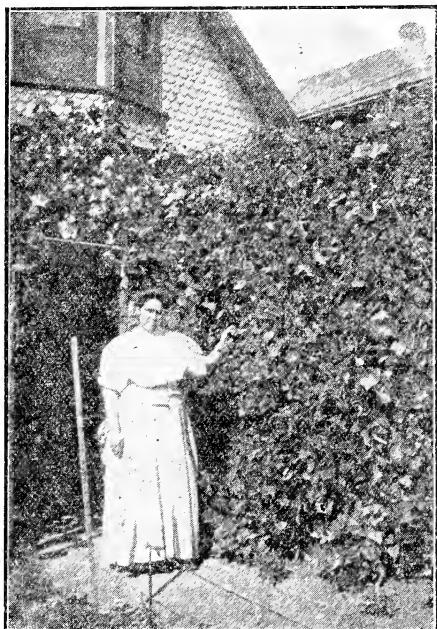
What one grower says of it:

"A shell bean more prolific than the navy, which it resembles." A native of the most arid part of the Arid Southwest. Drought-resistant. Grown by Indians for thousands of years without irrigation with an annual rainfall of 9 inches. Quick maturing. Sixty-five days from seeding to harvest. Available as a catch crop. New botanical family and immune to common bean diseases. Flavor, delicious and distinctive. Cooks well. Very nutritious. Has 11 per cent greater specific gravity than navy beans and swells to 40 per cent greater bulk. A cheap seeding proposition as it takes only 12 lbs. to the acre."



The Monstrous Lima in the Home Garden

THE ARBOR BEAN



This bean is new to the American people, but popular in Sunny Italy, where it is grown in many back yards over arbors to shade a porch or window. Within six weeks it will grow to a height of ten feet, and during the summer will exceed thirty feet, bearing edible beans at six weeks, and continues until frost. The beans are tender, and in flavor equal to the best. They should be sliced before cooking, same as the popular Scarlet Runner. If you want shade, be sure to plant these beans and you will have both shade and an abundance of beans.

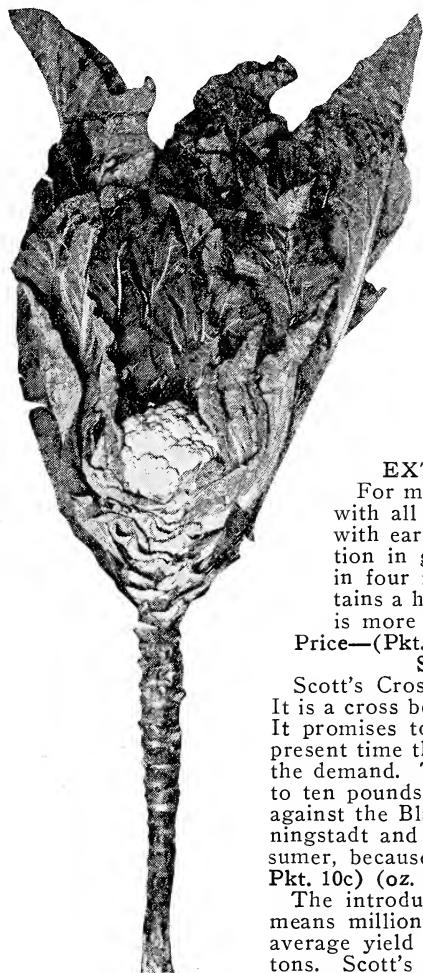
The picture shows the growth of this bean the second year from planting. It bore a few beans all winter and the new growth was in bloom early in April. The vines were much more prolific the second season. This bean is very desirable where a shade is wanted quickly, and very valuable for the table, but should be cooked when quite young.

Price—(Pkt. 5c) ($\frac{1}{4}$ lb. 20c) (1 lb. 60c), prepaid.

The Arbor bean will grow two crops of beans each season. When the first crop is harvested, allow the vines to In a remarkably short time new growth will begin, and soon a wonderful bloom will appear. Apply water frequently, because the blossoms fall quickly if allowed to suffer for water during the heat of summer.

nearly die for lack of water; then irrigate. will begin, and soon a wonderful bloom will appear. Apply water frequently, because the blossoms fall quickly if allowed to suffer for water during the heat of summer.

CALIFORNIA PEARL CAULIFLOWER



California Pearl
Cauliflower

This variety is a favorite from California to New York, because of its excellent shipping qualities. It originated here and has made Southern California famous for her excellent cauliflower. The California Pearl is thoroughly adapted to a semi-tropical climate and is particularly suited for shipping because of the flower being completely enveloped within spiral curled leaves, which protect the flower from injurious exposure to rain, sunshine or frost, but particularly from injury in packing and in transit. It retains its fresh appearance longer than any other variety. It is decidedly the shippers' favorite. It is the gardeners', the dealers' and the consumers' favorite. It is a six months' crop therefore the seed should be sown July to February. Price—(pkt. 15c) ($\frac{1}{4}$ oz. 65c) (oz. \$2.00) ($\frac{1}{4}$ lb. \$6.00) (1 lb. \$20.00) Postpaid.

EXTRA EARLY CALIFORNIA PEARL

For many years we have tried to get a cauliflower with all the merit of the California Pearl combined with earliness. We have at last succeeded by selection in getting such a cauliflower that will mature in four months from time of transplanting and attains a height of only two feet instead of four, which is more desirable for horse cultivation.

Price—(Pkt. 15c) ($\frac{1}{4}$ oz. 65c) (oz. \$2.00) ($\frac{1}{4}$ lb. \$6.00)
SCOTT'S CROSS CABBAGE

Scott's Cross is one of the best to grow for shipping. It is a cross between the Winningstadt and the flat Dutch. It promises to outrank the Winningstadt, but up to the present time there has not yet been sufficient seed to meet the demand. The heads are very solid, will average eight to ten pounds. It is a sure header and almost proof against the Black Aphis. Yields much heavier than Winningstadt and sells easily to the shipper, and to the consumer, because of its attractive appearance. Price—(Per Pkt. 10c) (oz. 60c) ($\frac{1}{4}$ lb. \$2.00) (lb. \$8.00). Postpaid.

The introduction of this cabbage into the Southwest means millions of dollars to the growers. An ordinary average yield of Winningstadt per acre is eight to ten tons. Scott's Cross will average twelve to fourteen tons of a better grade. This means about fifty dollars per acre more at no greater expense. The additional price of the seed amounts to \$1.50 per acre against a gain of fifty dollars per acre.



Winningstadt



Scott's Cross

CORN**A. & M. OREGON EVERGREEN (SWEET CORN)**
Originated in Los Angeles County, Cal.

Oregon Evergreen Corn now has the endorsement of every gardener that grows for the Los Angeles market. We are safe to say that any gardener growing this corn for any other market. We are safe to say that any gardener growing this will show to his customers its superiority over all other sweet corn. This is the eleventh year since we first offered this new and distinct variety. The demand has

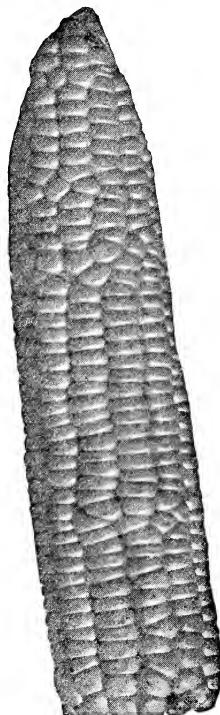
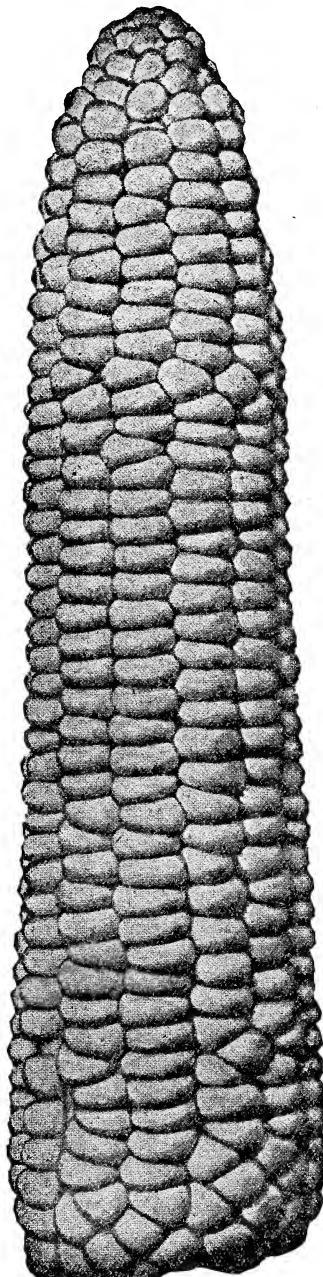
grown each year until it is now practically the only variety offered on the Los Angeles market. This excellent sweet corn has made wide progress in popularity during the season just past. It leads all other varieties at Portland, Oregon, and throughout the garden belt in Southern Texas. The peddlers will have no other and one no longer hears the consumer complain about the poor quality of the California sweet corn. The advantages of this corn over all others are its earliness, its large size, rarely less than eight inches long, clear of husk. The grains are full to the tip. The husk is very thick and folds so tightly over the grains that the worm does very little damage, compared with other varieties. The thick husk is also desired by the peddler and the groceryman, because it can be held over two days before it appears old or wilted. It is very productive, averaging three good ears to every stalk, often bearing five marketable ears. This too is the ideal corn for the canner, because a field of this variety remains in prime condition for canning a period of three weeks, while other varieties cannot be used ten days after the first picking. It is worth to the canner just twice as much as other varieties.

Price—(Pkt. 5c) (1 lb. 20c) (10 lbs. \$1.25) (100 lbs. \$10.00).

A. & M. EARLY ADAMS
Originated in Orange Co.

This is a blend between the Oregon Evergreen and the Eastern Extra Early Adams. The superiority of this strain over the former Eastern-grown Adams is shown in its earliness, large size and sweetness. It is nearly as good as the Oregon Evergreen, and is earlier and harder. It is one of the many good things that originated here. Two years ago when frost destroyed about all early vegetables, many gardeners plowed under their Early Adams, thinking it was destroyed, but one large grower near Los Angeles for some reason did not disturb his field, and was surprised to see it revive and produce a good crop, as though undisturbed by frost. This grower was selling corn three weeks earlier than others, and demonstrated that frost will not destroy this variety when quite young.

Price—(Pkt. 5c) (1 lb. 15c) (10 lbs. \$1.25) (100 lbs. \$9.00) A. & M. Early Adams
Plant Golden Bantam in the home garden for first early. (Pkt. 5c) ($\frac{1}{4}$ lb. 10c). $\frac{1}{2}$ Natural Size.





The Los Angeles Public Market as it Appears in Front of Our Store Every Week-Day Morning. Our Building is Indicated by the Arrow

LEMON CUCUMBER

Although we have given special mention of this excellent cucumber for five years, it has not been accepted by new customers as it deserves. Every one who has tried it is unanimous in its praise and would not think of omitting it from the spring garden. It is the color of a lemon when ready to use, and similar in shape, being less pointed at the ends.

Plant four or five hills for a family garden. Cultivate same as other cucumbers, water freely and you will have four times as many cucumbers as any other variety will produce.

Mr. Dennis, of Orange County, found eager buyers at the Long Beach city market for his entire crop.

Mrs. Morse, of Arizona, writes that she sold three dollars worth of cucumbers grown from ten cents worth of seed, besides using all they wanted.

Price—(Per pkt. 5c) (per oz. 15c).

NOTICE---HOOTHOUSE GROWERS---NOTICE

TELEGRAPH-DAVIS CUCUMBER

The English Telegraph Cucumber is recognized as the best for hothouse growing, but it is next to impossible to obtain seed of it even at one dollar per one hundred seeds. In order to have a cucumber equally meritorious, we have hybridized the Telegraph with the Davis Cucumber, and believe we have something that excels the Telegraph.

Mr. Horace McDevitt of Los Angeles grew 284 cucumbers on eight vines, not one of which was less than 12 inches, and many were 20 inches long. He says they should be trained to grow on a trellis; because of their great length they will not grow straight on the ground. Price—(Per pkt. 25c) (1 oz. 75c) ($\frac{1}{4}$ lb. \$2.00).

SPANISH SWORD BEAN

This bean is very popular in the West Indies and grows to perfection here. It is a bush variety and rampant grower. The pods grow fourteen to eighteen inches long. The beans compare favorably with the Broad Windsor, but are more palatable. It is a wonderful crop to grow for hog pasture or for green manuring.

Price—(Per pkt. 10c) ($\frac{1}{4}$ lb. 25c).



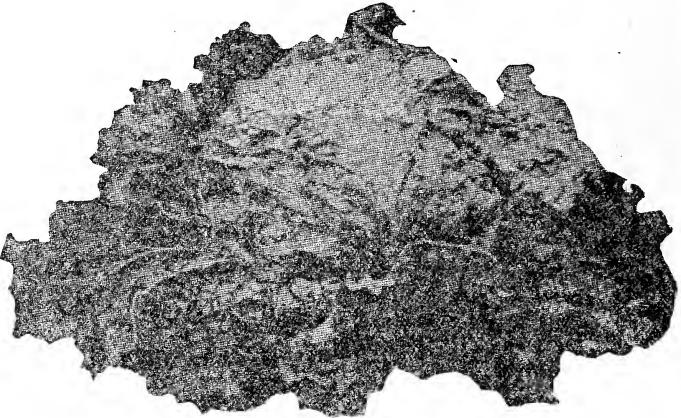
Sword Bean

LETTUCE

We give particular attention to securing the best strains of lettuce. The two varieties described on this page are undoubtedly the best for Southern California. Plant Marblehead all the year but the New York Special only from Sept. 1st until Feb. 1st.

This variety should more appropriately be called the Los Angeles Lettuce, because in Northern and Eastern cities, wherever it appears on the vegetable stands it is called the Los Angeles Lettuce, and commands a more ready sale and higher price than any other variety, because of its crispness and excellent flavor. In the Southwest it should be planted only during winter months, from Sept. 1st to

Feb. 1st. Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 70c) (1 lb. \$2.00) (5 lbs. \$9.00) postpaid.



New York Special

MARBLEHEAD LETTUCE

This is an improved strain of the well known Iceberg. The heads are more solid and for all the year round there is no better lettuce. It is crisp, has a delicious nutty flavor. Our seed is grown from selected seed stock and every plant that would not head properly was cut out and not allowed to go to seed.



We are safe to guarantee that from October until May, with proper care, fully ninety per cent of them will make perfect heads.

Price, (Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 60c) (1 lb. \$1.75) Postpaid.

A WORD ABOUT NEW YORK SPECIAL LETTUCE

This is the Los Angeles Lettuce, famous throughout the United States. During the winter months it is being shipped as far east as Boston, and there is a record of one car having been received in Wisconsin at a time when the thermometer registered twenty degrees. The lettuce was handled without injury. More than 600 carloads of lettuce was shipped from Los Angeles last season. It is a safe estimate to state that the present season will have shipped 1000 cars. The shipping of Lettuce in straight carloads is a comparatively new feature. It promises to equal celery, cabbage, and cauliflower as a commercial product.

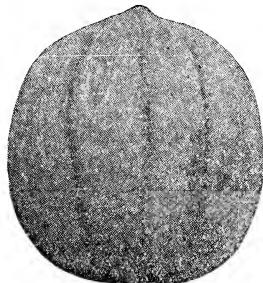
Our New York Special is the variety that makes shipping possible, no other variety will do.

Remember New York Special Lettuce will not head during the hot summer month.

Iceberg Lettuce often scalds and turns brown in summer, particularly if the soil is sandy.

A. & M. Improved Hybrid Casaba

Introduced by us in 1902. If interested, write for our Casaba Circular.



A. & M. Hybrid Casaba. Price (per lb. \$2.00).

This is the Prince of all the casabas. The original Turkish casaba brought to this country about thirty years ago, found its ideal home in Southern California. This casaba became hybridized with the Montreal muskmelon. This produced a delicious casaba, but too large and too soft to become a popular



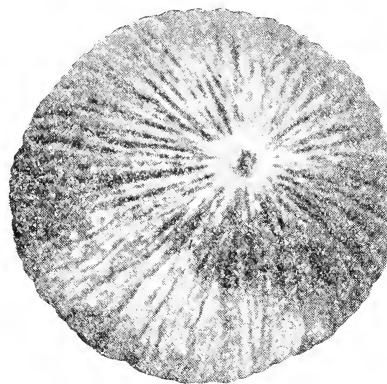
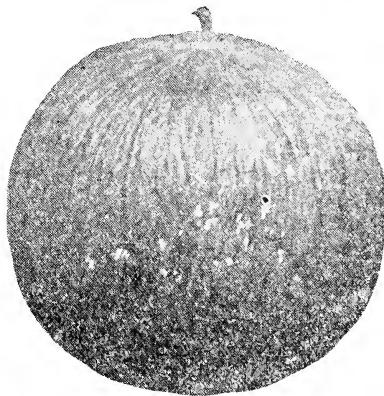
A. & M. Improved Hybrid, Prince of all Casabas. Price (per lb. \$2.50).

market melon for all purposes. The shipper could not use it, and the peddler could not handle it with profit, but the consumer called for it. By careful selection for several years we now have the Prince of all casabas. It is about the size of a large Hackensack muskmelon, a good solid keeper, and shipper, with a most delicious flavor. Whether you plant several hills or several acres, plant this Prince of all casabas.

Several years ago we gave this the title of "Prince of All Casabas," with the above description. The title passed not only unchallenged, but further confirmed by universal praise. Our testimonials would more than fill this book. Be sure to ask for the Improved strain.

Price—(Pkt. 10c) (oz. 25c) $\frac{1}{4}$ lb. 75c) (1 lb. \$2.50) (5 lbs. \$11.50) postpaid.

JENNY LIND CASABA

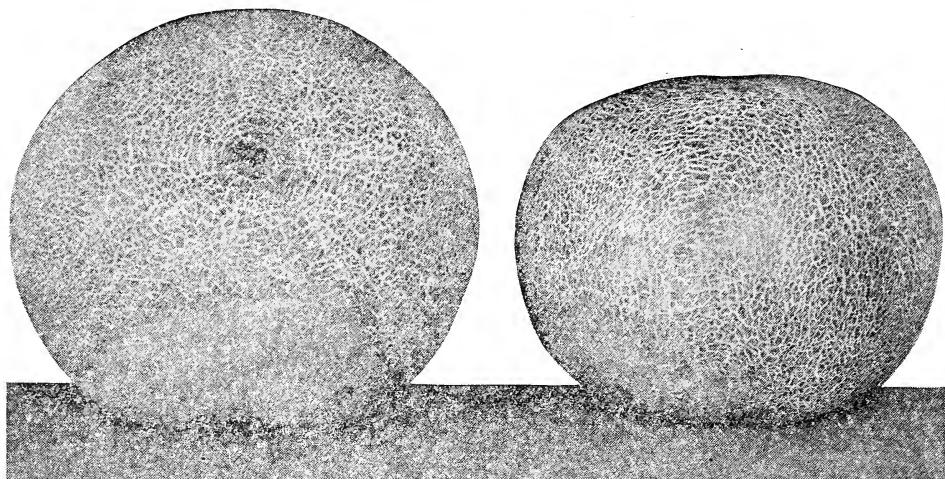


Jenny Lind Casaba

This beautiful casaba originated with Mr. J. S. Oestergard of Burbank. It was six years ago he hybridized the Winter Pineapple Casaba with the Jenny Lind Muskmelon. After several years of selection he pronounced this one a perfect blend. It is remarkably uniform in color, shape, and general appearance. It is very sweet, with a flavor decidedly like the Jenny Lind Muskmelon. It is a good casaba for local markets, and equal to the Hybrid for shipping. The color indicates when it may be eaten.

Price—(Per pkt. 10c) (oz. 25c) $\frac{1}{4}$ lb. 75c) (1 lb. \$2.50).

RULE'S CHOICE

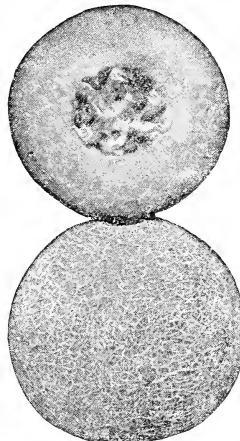


The Famous Armenian or Persian Melon

Although we introduced this melon five years ago, we have just discovered that we have the famous Armenian or Persian melon, so popular throughout Southern Europe. We named it Rule's Choice because Mr. Rule chose this melon as being the best among a dozen European melons. It is of medium size, heavily netted, without ribs; yellow flesh, of delicious flavor. A few melons kept in a cellar will permeate a whole house with a pleasing aroma. It is a good keeper, holding one to two weeks.

It was grown quite extensively in the San Fernando Valley last season. These growers sold at high prices when it was difficult to sell any other variety. Our seed is pure, every melon like the picture.

Price—(Pkt. 10c) (oz. 25c) ($\frac{1}{4}$ lb. \$1.00) (1 lb. \$3.00).



**Yellow Fleshed
Columbus**

Yellow Fleshed Columbus Muskmelon

This excellent muskmelon originated here and was introduced by us two years ago. It at once became popular with the cafeteria and hotel trade, where the entire crop of the first year was consumed. The second year the peddlers discovered that it would carry two and even three days on their wagons without deterioration. The storekeeper, too, learned of its good keeping qualities, and the housewife learned to know that every melon is a good one, so that it is now one of the most popular muskmelons in the Los Angeles market. A slightly oval melon about seven inches in diameter, entirely without ribs, but roughly netted, color, outside light creamy, inside yellow. It is enormously productive and because of its solidity and heavy netting, it may be shipped in car lots without crating.

Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50).

READ THIS. If you would prolong the life of your vines, make a path between the rows by training the vines to grow along the rows, and not across from one row to the other. Then at picking time do not allow the pickers to tread upon the vines. To do so makes many culs and shortens the life of the vines and lessens your profit about one-third.

WATER MELON ANGELENO

Introduced by us in 1908

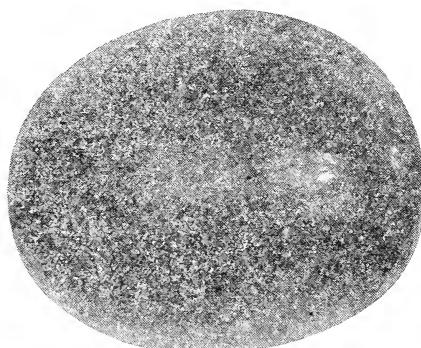
Never in the history of watermelons has any variety grown into such prominence with shippers in so short a time as did the Angeleno. It was the first in the Los Angeles market, and every one was a ripe melon. The buyer was never disappointed, because it is not picked until the yellow shows slightly through the green. Stay with the sign when picking. The deep red flesh and excellent flavor of the melon commends it to the consumer, while the beautiful dark green color of the rind makes it attractive to the buyer.

IMPORTANT NOTICE: Owing to the tendency of the seed of this melon to split open we advise all planters to soak the seed in water for only a few hours. It soon closes and is ready to plant, and every seed will germinate, but if planted before soaking, the seed becomes filled with dirt and decays. Please heed this notice.

Mr. Conkey, of the Imperial Valley, says the Angeleno excels all other varieties as a shipper, and his field of Angelenos ripened as early as his Black Seeded Chilian.

The fine large Angelenos that came from the San Joaquin Valley last season were grown from our seed. They have proven so satisfactory that many large growers secured their seed from us for the coming season before it was harvested.

Price—(Pkt. 5c) (oz. 20c) $\frac{1}{4}$ lb. 60c) (1 lb. \$1.50) (5 lbs. \$6.75) Postpaid.



Angeleno

KLONDIKE

Introduced by us in 1909

The now famous Klondike originated in the private garden of Mr. A. M. Mitchell, of Redlands, who recognized he had a melon superior to all others; we are indebted to him for two fine specimens sent us in 1908. When we visited a field, where we saw ten large wagons loaded with fine melons of uniform shape and size, the grower made the following statement: "I could sell all the melons I have, but I cannot get teams to haul them. The yield is so enormous. The rows are nearly one mile long, and one wagon was hauling all week from one row and did not get the half. I have been taking ten tons of melons

a day from this field for three weeks, and you cannot miss them. My rows are eighteen feet apart and hills are twelve feet apart. See for yourself. No other variety will make such a growth or yield so many fine melons."

We give it our unreserved endorsement to all melon growers throughout the Southwest for your local trade, or for your home garden. It excels all other varieties in flavor. It is so crisp we cannot recommend it to the shipper on this account, but no other watermelon remains good so long after picking. It has remained edible for six weeks. The seeds are very small and one-half pound will plant an acre. Price—(Pkt. 5c) (oz. 20c) $\frac{1}{4}$ lb. 65c) (lb. \$2.00) (5 lbs. \$9.00) postpaid.

NOTICE: Plant your muskmelon and watermelon seed with our Segment corn planter; it does the work better, more easily, more quickly and more uniformly than any other way.

Black Seeded Chilian has come into favor with large growers because of its earliness and uniformity in shape and quality.

FOR MELON BLIGHT. Mr. Van Norman, of San Gabriel, says: "Cover the hills with dirt. It gives new life to the vines, and prevents the spread of blight."

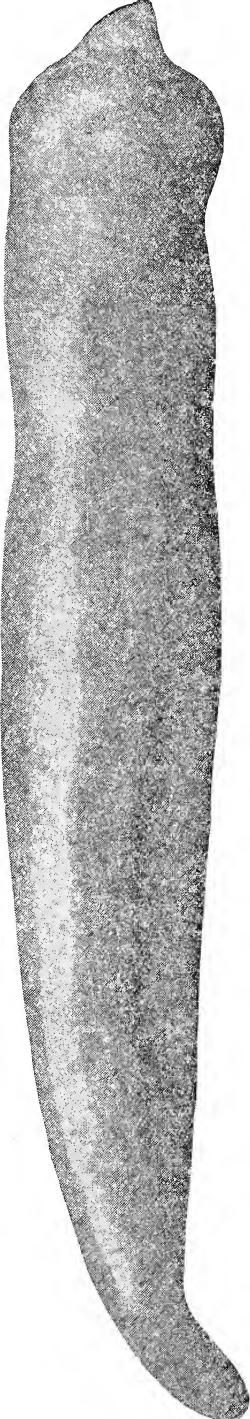
FOR ROOT DISEASE. Dissolve one pound of Bluestone to five gallons of hot water in a wooden vessel. As soon as the presence of the disease is apparent in the field, pour a tin cup full to each plant whether affected or not, so that the liquid will drain to the main root. In order to test this, we experimented with a solution of double strength without injury to the plant. Mr. Richardson of San Gabriel claims to have checked the disease with one liberal application of Bordeaux Mixture.



Klondike

ANAHEIM CHILI PEPPER

Introduced by us in 1903



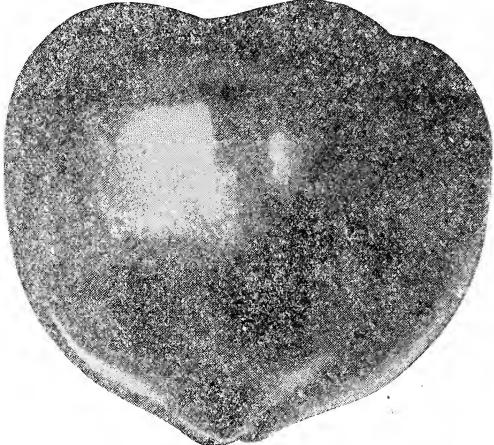
The popularity of this pepper continues to grow enormously. A few years ago known only to growers of Orange County, where it originated, it is now a staple article of commerce, superseding the extremely pungent Black Mexican pepper so popular in Old Mexico. Our sales of Anaheim Chili seed in Arizona, New Mexico, Texas and Old Mexico have been surprisingly large. The seed we have was procured from selected peppers, and not one pod was less than seven inches long. We purchased the peppers and had the seed taken out on our own grounds, under our supervision. It is 100 per cent. pure. It is a safe crop to plant; it has no insect enemies; when dried it is not perishable. The price is rarely less than twelve cents per lb. dried, and often double that figure. The market formerly depended wholly upon the consumption of the Southwest, but the market has extended to Eastern cities, and the demand has now doubled and the price correspondingly high.

The market for green chilies, too, is enormous, because of the large demand of the canneries who used the product of several hundred acres last season, and this industry is only in its infancy. The Anaheim Chili is desired above all others by the canner because of its fleshiness and slight pungency. Canned Chili was unheard of until we introduced the thick-meated Anaheim Chili.

Price—(Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (1 lb. \$2.50) (5 lbs. \$12.00) postpaid.

PIMENTO

Our seed is pure.



This pepper was introduced by us in 1911. It has already become one of California's many staples ranking with the Anaheim Chili as a canned product. One cannery used the entire crop from 200 acres of Pimientos. This is because of its lack of pungency and its firm, thick fleshiness, which permits of its being scalped and peeled. It should be grown largely in the family garden, because it is delicious with salads or stuffed, and a healthy food to eat when ripe as you would eat an apple.

Price—(Pkt. 10c) (oz. 50c) ($\frac{1}{4}$ lb. \$1.50) (1 lb. \$5.00).

About 1000 acres are devoted to the production of Chili peppers, of which the average production is about ten tons to the acre, and they bring \$18 a ton. Dried, the product amounts to about a ton to the acre, and they are bringing 10 cents a pound. So great has been the development of this chili industry that a drying plant has been erected at a cost of \$7000, and the gross value of the crop last season was close to \$1,000,000. This is an exceedingly attractive business, for the farmer with a small area and does practically all of his own work.

Reduced One-Quarter
Anaheim Chili

A. & M. FIRST EARLY TOMATOES

Introduced by us in 1909; now the leading Early Tomato and growing more popular each year.



A Birds-eye View of Part of a Hill on Which We Counted 136 Tomatoes.

This is the fifth season for this tomato, its popularity has extended throughout the Southwest and into Old Mexico. Its unusual earliness, large average size, its solidity and good shipping qualities make it a favorite with the grower. Its bright red color, mild flavor, scarcity of seeds make it a favorite with the consumer. Mr. McDowell of Orange County, sold from one-third of an acre, from May 30th to July 10th, \$260.00 worth of tomatoes, and the ground was literally covered with tomatoes, after it was no longer profitable to market them. One association purchased seed for three hundred acres. This variety has broken the world's record for an extra early, large prolific tomato.

Price—(Pkt. 10c) (oz. 50c) ($\frac{1}{4}$ lb. \$1.50) (1 lb. \$5.00 postpaid.)

Mr. E. L. Howell, writes on July 1st, 1914: "I have given the tomato culture scientific study for a number of years, with the intention of making tomato growing a life business. I decided to have the best only. I have tried the following eight leading varieties for earliness, productiveness, and flavor. (Here he named eight leading early varieties from other seedsman.) They all fade before the A. & M. like a shadow before the sun. I have counted 250 tomatoes on one vine six weeks after transplanting. Last year I counted 320 tomatoes on one vine."

THE HOME TOMATO

A New Tomato for the Home Garden

The best late variety for the home garden. It is pink in color, large, almost round, smooth, nearly seedless, prolific, and has a delicious flavor all its own. You will congratulate yourself upon having this tomato every time you eat one.

This tomato would become very popular at the municipal markets. It is a good variety upon which to build a reputation. Price—(Pkt. 10c) (oz. 40c).

List of Up-To-Date Seeds

Garden, Field and Flower Seeds and Plants

Everything Pertaining to the Garden

Incubators, Brooders, Poultry Food and Supplies

We will catalogue only standard and such other varieties of vegetable seeds as have been thoroughly tested by us and have proved particularly adapted to the climate and conditions of the great Southwest; other varieties that have proven of less value in this section will not be listed.

Localities nearer the coast within reach of the coast fogs require different cultural instructions and different varieties than those that would thrive best in the sections east of the Coast Range. We would request those who are unfamiliar with the requirements of their local conditions to write us for information.

The numerous letters we have received from customers pleased with the results of their seeds is evidence that our efforts to secure good seeds and improved varieties are meeting with marked success.

That our zeal to advise the amateur grower and the new colonist what to plant, when to plant and how to plant, has been of great benefit, is proved by many who have written to us of their success with our seeds and our advice.

Nowhere in the world is there such necessity for competent, intelligent seedsmen as in Southern California, because of the diversity of climate, of soil, and of local conditions.

TO THE BEGINNER: We request that beginners and new-comers consult us either by letter or in person when additional information and advice is wanted other than is contained in these pages. Always give your local conditions of soil and climate, and whether a market gardener or a general rancher. All inquiries will command prompt attention.

SEEDS WE OFFER—As to the seeds we offer, we assure you that the utmost care is exercised to secure only reliable and true to name seed. We have devoted much time and attention to learning the varieties of garden and field crops suited to each locality. This information will often be found of great service to intending planters.

We are continually testing the germination and purity of our seeds, but owing to the diversity of climatic conditions, insects, inexperienced growers, and liability of mistakes on the part of the numerous middle men from the grower to the planter, each living in various parts of the globe, Aggeler & Musser Seed Co. cannot and will not guarantee the germination or product of any seeds they sell.

Our record for the past twenty years has given us such a reputation for fair treatment that our oldest customers are our best advertisers.

FULL INSTRUCTIONS ARE GIVEN WITH EACH SUBJECT

Under the Heading of Culture

Owing to the different climatic conditions of each locality, no general rule can be applied as to time of planting, and what varieties to plant. Home gardeners require different instructions from market gardeners, and market gardeners are governed by different conditions than shippers.

We have prepared a guide for planters that is accurate if care will be taken to see that the soil and local conditions are suitable. This guide is printed on the inside of the last cover page, but for particular information concerning each subject we invite you to ask us what you want to know concerning culture and marketing.

We have just printed a Garden Manual for the family gardener and the school children of the great Southwest. It is free with your first order if you ask for it.

From the Los Angeles Times, October 1st, 1914.

Growing of winter vegetables in the frostless belt of Orange County has proven especially profitable, where growers have been operating through a co-operative organization. The ranchmen are making preparations for planting this winter in larger acreages than ever before. They figure that with the exposition on, the demand for winter vegetables will be better than ever.

According to statistics gathered by the association, the members will turn into the association for marketing the product of planting as follows: Chinese Giant peppers, 178 acres; green peas, 189; yellow and green string beans, 62; Mons-trous lima beans, 44; rhubarb, 32; chile peppers, 21; egg plant, 11.

For the year just ending the association sold vegetables for its members for \$62,160. The grower who got the most was J. B. Handy, whose receipts were \$4715.44.

One of the most remarkable instances of productiveness reported by the association was the receipt of T. G. Bratch of \$814.92 from an acre and a quarter. C. B. Thompson sold egg plant from a quarter of an acre for \$300.

P. H. Medlin planted two sacks of green pea seed, and from his patch he realized enough to buy a Maxwell automobile for \$815. From six acres of bell peppers A. D. Paxton's receipts were \$3000.

In order that we may be of greatest benefit to our friends, we have published for free distribution to all of our customers and to all the schools of the great Southwest, a **Garden Manual**, of 32 pages of valuable information to the beginner.

What follows on this page is a sample of what information is contained in the manual.

**ASK FOR IT WITH YOUR FIRST ORDER FOR SEED. IT IS FREE.
GARDENING MADE EASY**



The proper way to grow cucumbers

Make ridges four feet wide, plant three feet apart on each side of the ridge. Irrigate between the ridges.



A field of lettuce two rows on a ridge

First give the soil a good soaking, wetting it down two or three feet deep. As soon as it can be handled without sticking to the spade, dig ten or twelve inches deep, turning the soil over and pulverize it thoroughly. Then make ridges to stand about six inches high, flattened to about ten inches wide on top and twelve inches between ridges. Drill the seed or transplant on each side of the ridge. Irrigate in the furrow between the ridges. By this method two rows are irrigated with one furrow, and you will have only one furrow to cultivate after each irrigation. It is easy to see the advantage of this method over the usual way of drilling on level ground and irrigating each row, often flooding the plant, which is harmful, particularly during the heat of summer. The following is a list of vegetables that should be planted the way we have illustrated in the picture:

Beets	Kohl Rabi	Parsley	Salsify
Chard	Lettuce	Parsnip	Spinach
Carrot	Onion	Radish	Turnip

A large share of the vegetables are grown by ranchers as side lines to their citrus growing business. Much of the produce is grown between rows of young trees.

Artichoke

The seed may be sown at any time and transplanted when about eight inches high. It will mature in about eight months from time of planting the seed, but in Southern California the proper season to bloom is in March.

The best way to get a good artichoke is to secure plants from old stalks of some good strain, as seeds cannot be depended upon to produce any certain variety. One half dozen is enough for a family garden.

Transplant five feet apart in rows seven feet apart. When the young plants are attacked by aphis spray with "Black Leaf 40." About the time the buds are well advanced the under leaves often become a harbor for flies and aphis. When this occurs break off all the under leaves,

clear the ground of all rubbish. You will then have a long season of large clean buds.

Selected Large Green Globe.—French stock is the standard variety. (Pkt. 10c) (oz. 50c) ($\frac{1}{4}$ lb. \$1.15) (lb. \$3.50) postpaid.

Plants from good stalks, 15c each—\$1.50 per dozen, postpaid.

Giant Cardui.—Culture same as artichoke. It is grown particularly for the

leaves, which are a table delicacy when parboiled, dipped in flour and fried in butter. The buds also are good prepared as artichokes. (Per Pkt. 25c).

ASPARAGUS

Culture for Home Gardens.—In January plant roots two or three years old eighteen inches apart, in rows four feet apart.

To start a large acreage, the seeds should be sowed in drills about fifteen inches apart. Sow in March, and transplant the following January. In fifteen months it will be ready to ship. In some sections earlier.

Palmetto.—The leading and most popular variety for the home garden or market. The tender sprouts are green and their delicious flavor makes this variety the favorite for table use. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 85c) postpaid.

To prevent rust, spray freely with powdered sulphur.

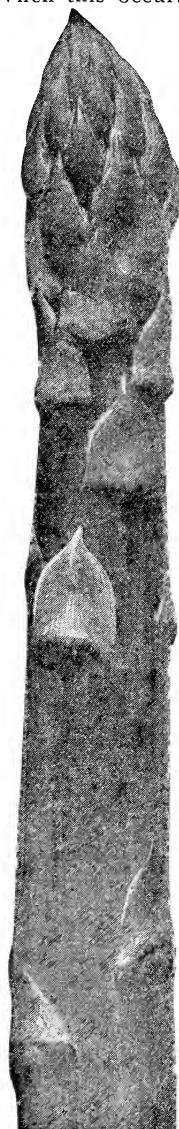
Conover Colossal.—Nearly the same as Palmetto, possibly larger, but culture has so much to do with size and quality that it is difficult to state which is the better variety. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 85c) postpaid.

Barr's Mammoth.—A large white sprout, the flavor of which is generally liked. This is an excellent variety for canning, where appearance is desired. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 20c) (lb. 60c) postpaid.

Giant Argenteuil.—An excellent variety for the canner and early shipper. This variety is now more extensively grown by large planters and shippers because it is more prolific, and stands shipping better. Also its purple tinge is attractive, and its excellent flavor puts it on an equal with the Palmetto for table use.

(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00). Postpaid.

Asparagus Roots.—We have, always on hand, roots of the Palmetto and Argenteuil varieties. One year old roots, (per doz. 20c) (100 roots, \$1.00 postpaid) (1000 roots, \$6.00 f. o. b. Los Angeles) Two year old roots, (per doz. 30c, postpaid) (100 roots, \$1.50, postpaid) (1000 roots, \$8.00 f. o. b. Los Angeles).



Beans

For larger quantities write for prices as the market changes. All orders for large quantities that would be cheaper to send by express or freight, we deliver to the transportation company at Los Angeles. We do not prepay transportation unless sufficient money has been sent for that purpose.

Market gardeners who are beginners and not familiar with gardening in the Southwest would do well to consult us either in person or by mail before buying, as to variety and time of planting. Special attention should be given to the instructions concerning the time of planting, which is an important factor in Southern California, as each month requires a different variety according to the market for which they are grown.

Culture for Home Gardens.—Plant early Refugee and Golden Wax early in April. Plant one to two inches deep, six inches apart, in rows twenty inches apart. Plant Kentucky Wonder at the same time. Train them to grow in arbor fashion by placing poles and wire to grow upon. As soon as the plant is well formed, cultivate frequently; let no weeds grow. Spray with powdered sulphur just before the bloom shows, to avoid mildew. Sulphur will prevent mildew, but not cure a plant once attacked, but will check it. Plant every month until September.

The seed germinates quickly and should show above ground within a week if no rain falls before that time. The seed will rot in cold wet soil. It requires six to eight weeks to mature string beans, but weather conditions may delay maturity much longer.

Market gardeners should read carefully the description of each variety.

Anyone having light, sandy soil that needs enriching, should plant it to beans, inoculating the seed with nitrogen culture.

The following list comprises all the varieties best suited to general gardening. We have ceased to catalogue others that would only mislead the gardener.

Tepary Bean.—See novelty, Page 18.

Lady Washington, Small White, Black-eye, or Pink.—These are the beans of commerce, and should be grown on large acreage. It is easier to sell a carload than to sell one ton.

Write for price of seed, which fluctuates with the market.



Early Refugee Bean

Price—(Pkt. 5c) (lb. 30c prepaid) (10 lbs. \$1.75).

Stringless Green Pod.—One of the best varieties for first early spring planting. It is very prolific and tender, a great favorite with market gardeners for a quick maturing crop. (Pkt. 5c) (lb. 35c prepaid) (10 lbs. \$2.00).

BUSH BEANS—Flat Green Pod Varieties

Canadian Wonder.—Flat pod, of good flavor, not stringless, but otherwise tender. Very hardy. Desired above all others by gardeners growing on the foothills for winter shipping, because of its luxuriant growth and continuous bearing of long straight pods. Plant in September, October, November, December and January, according to your locality. Per (pkt. 5c) (lb. 25c prepaid) (10 lbs. \$1.25).

Six Weeks.—A strong, rapid grower, which matures quickly. Flat pod. Only desirable for forcing. Plant in February and March, also early in September and October. Price—(Pkt. 5c) (lb. 25c prepaid) (10 lbs. \$1.20).

French Mohawk.—Long oval pod, very tender and prolific. Matures in six weeks. Desirable for a profitable short crop, as only two months is required from seed time to the end of the crop. Plant every month from March to October. Per (pkt. 5c) (lb. 25c prepaid) (10 lbs. \$1.20).

Dwarf Horticultural.—Desirable both for green and dried beans. Stringless and of excellent flavor. It is of Italian origin and is very popular with the Italian population. Price—Per (pkt. 5c) (lb. 25c prepaid) (10 lbs. \$1.20).



Michigan
White Wax

Refugee Wax
Our Golden Wax.—Long, flat pod, rich golden yellow, stringless. This variety is so superior to other strains of Golden Wax that we have discarded all but this. Plant early in April to August. Per (pkt. 5c) (lb. 35c prepaid) (10 lbs. \$2.00).

Michigan White Wax.—A half round golden yellow pod not so long nor as straight as the Ventura Wax, but of excellent quality for eating, very prolific and specially recommended to market gardeners for fall planting, because it ranks with the most profitable for growing, for selling and for keeping. It is a good long distance shipper; is hardier and withstands wet and cold better than most varieties of wax beans.

Price—(Pkt. 5c) (lb. 30c) (10 lbs. \$2.00).

Do not fail to order a pkt. of Arbor Beans or Monstrous Bush Lima Beans. Both are wonderful. See pages 17 and 18.

To improve your soil plant Windsor, Soja, Blackeye or Whippoor-will Beans. Sow from April 1st to Sept. 1st. Inoculate the seed with Nitrogen Bacteria.

If your soil is new, it needs nitrogen. If it is sandy, it needs both humus and nitrogen. The easiest and most economical way to supply both elements by one effort is to inoculate your bean and pea seed with Ferguson's Nitrogen - Fixing Bacteria. One fifty cent bottle will inoculate all the beans and peas usually required to plant a family garden.

Ask for our Garden Manual with your first order. It is full of information pertaining to the garden. It is free:

Ventura Wonder Wax.—Nearly all agree that this is a wonder indeed. Long flat pod, very prolific; bears early, and continues nearly all summer; planted in September, if not too cold, bears until January, being rust proof. This bean was introduced by us in 1900, and has been the market gardener's favorite since that time. Plant from February to October. Per (pkt. 5c) (lb. 40c prepaid) (10 lbs. \$2.50).

BUSH BEANS—ROUND OR YELLOW POD VARIETIES

Stringless or Refugee Wax.—This bean has become a favorite with the market gardener because of its hardy growth and enormous yield of tender, round stringless pods of excellent flavor which sell readily. Plant from April until September. Per (pkt. 5c) (per lb. 40c prepaid) (10 lbs. \$2.50).

Prolific Black Wax.—Pod round, straight, five to six inches long. Decidedly the most desirable for mid-summer gardening. Plant from April to August. Per (pkt. 5c) (lb. 35c prepaid) (10 lbs. \$2.00).

BUSH BEANS—FLAT YELLOW POD VARIETIES

Davis Kidney Wax.—Good bearer; pods are long, rustless and hardy; very tender when young. Per (pkt. 5c) (lb. 40c) (10 lbs. \$2.50).

BUSH BEANS—FLAT YELLOW POD VARIETIES

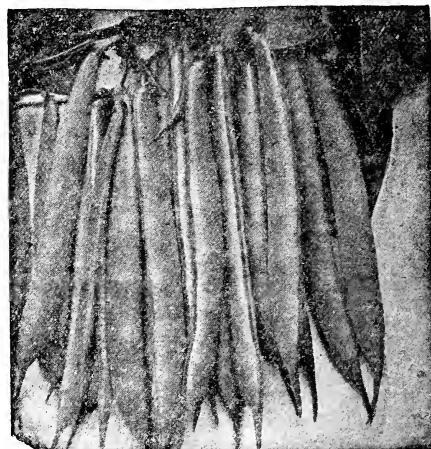
Davis Kidney Wax.—Good bearer; pods are long, rustless and hardy; very tender when young. Per (pkt. 5c) (lb. 40c) (10 lbs. \$2.50).

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Ventura Wonder

POLE BEANS

White Seeded Kentucky Wonder.—The old well-known Kentucky Wonder was considered perfection in the way of a tender prolific bean, but the White Seeded Kentucky Wonder excels the other in being more prolific, always four to six large beans on a stem. It is ten days earlier, which means money to the gardener. It is less susceptible to rust and mildew than the Brown Seeded Kentucky Wonder. The seed is pure white which makes it a profitable commercial bean. Price—(Per pkt. 5c) (1 lb. 40c prepaid) (10 lbs. \$2.50).

Kentucky Wonder.—Long, round pod. This is the most popular bean in Southern California, because here it grows to perfection; is, with the exception of the White Seeded Kentucky Wonder, far more prolific than any other variety, which, together with its other good qualities, makes it the market gardener's delight. Plant from April to July. Do not plant later than August, as it is very prone to rust during the month of September. (Per pkt. 5c) (per lb. 30c prepaid) (per 10 lbs. \$1.40).

Kentucky Wonder Wax Bean.—It commences to bear when scarcely higher than the average bush variety, and keeps on producing until killed by frost. It is a rampant grower, one vine filling a pole with a mass of vines densely loaded with luscious beans. They are firm, entirely stringless, and when cooked deliciously rich and buttery. The seed is brown, closely resembling that of the Kentucky Wonder. Plant from April to August. (Per pkt. 5c) (per lb. 40c prepaid) (10 lbs. \$2.50).

White Crease Back.—This variety is especially valuable for its extreme earliness, and its habit of perfecting all its pods at the same time. Vines small but vigorous, and, in good soil, wonderfully productive, bearing pods in clusters from four to twelve. Pods medium length, silvery green, of the best quality as snaps and stand shipping better than most sorts. The seed is small, oval, very white, and hard. It is an excellent bean to cook dry or to sell on the open market as the small white bean. (Per pkt. 5c) (per lb. 35c prepaid) (10 lbs. \$2.00).

Horticultural Pole, often called Italian Bean.—Short, thick, round pod, desirable as a string, shell or dry bean. Has long been a favorite and is well known. Plant in April. (Per pkt. 5c) (per lb. 30c prepaid) (10 lbs. \$1.75).

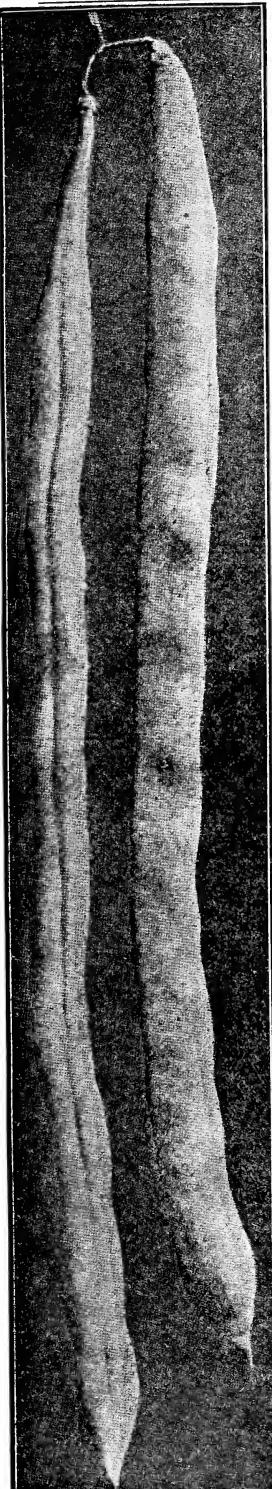
Lazy Wife.—Pods grow from six to eight inches long, entirely stringless, of a rich buttery flavor when cooked; retain their tender, rich flavor until ripe; a good white shell bean for winter use. (Per pkt. 5c) (per lb. 25c prepaid) (10 lbs. \$1.15) (100 lbs. \$10.00).

Celestial or Yard Long.—A curiosity and good table bean. Dark green foliage; pods over two feet long and very abundant. (Per pkt. 10c).

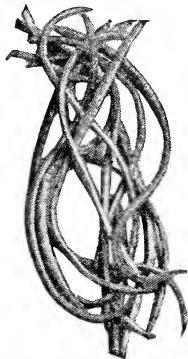
Scarlet Runner.—Ornamental as well as a good table vegetable. (Pkt. 5c) ($\frac{1}{2}$ lb. 25c). Prepaid.

Arbor Bean—See Page 18.

Italian Runner Bean.—This might also be classed as an Arbor Bean because its vines quickly grow twenty feet high if trellised, and no other bean is so prolific of pods, which are about four inches long, flat, green, absolutely stringless, and have a delicious flavor. Be sure to plant a few hills; it is something new but worth while. Sold only in ounce packets, 10c each.



Kentucky Wonder



Yard Long Bean

LIMAS, BUSH VARIETIES

Monstrous Bush Lima.—See page 17.

Burpee's Bush Lima.—This bean is very popular with the market gardeners in all irrigation districts because it is earlier and more easily grown. There are no vines in the way when irrigating and cultivating. It is enormously prolific and keeps bearing a long time. **Per (pkt. 5c) (1 lb. 35c prepaid) (10 lbs. \$2.00).**

Henderson's Bush.—Small white Lima Bean, of excellent flavor and enormously prolific. **Price—(Pkt. 5c) (1 lb. 30c prepaid) (10 lbs. \$1.50).**

Fordhook Bush Lima.—In order to get the best results, plant two feet apart in rows four feet apart. Although this bean has been offered for several years, it is comparatively a new variety. It is an improvement over the well known bush Lima because it is more prolific. It is a strong grower, more resistant to blight, and is more profitable to grow for the market because the pods remain green much longer than other varieties. This is of great advantage to the peddler and retailer. It has received universal praise. We recommend it to our customers for both home and market gardens. **Price—(Pkt. 5c) (1 lb. 35c prepaid) (10 lbs. \$2.00).**

Improved Bush Lima.—This bean differs from the old bush variety in being ten days earlier. Will yield one-fourth more tonnage per acre. The pods contain four to five beans that are larger and thicker than the old bush lima. Where the Improved Bush Lima is known the old variety is no longer in demand. **(Pkt. 5c) (1 lb. 35c prepaid) (10 lbs. \$2.00).**

LIMAS, POLE VARIETIES

Pole Lima.—The Pole varieties of Limas are far more profitable to grow than the Bush varieties; what they lack in earliness they make up in continuous bearing.

They should be planted from April 1st until September 1st.

The Skillman Lima.—This bean has been the market gardener's favorite for five years. It is a cross between the Burpee's Bush and the common lima. It will produce five sacks more per acre than the common lima. Each year we carefully hand pick our seed stock, selecting only the true type of seed. There are no rattlers in the Skillman.

Price—(Per pkt. 5c) (1 lb. 35c prepaid) (10 lbs. \$1.75).

Large White Lima.—One of the best shell beans, either green or dried. Very prolific; pods large. **(Per pks. 5c) (per lb. 35c prepaid) (per 10 lbs. \$1.75) (per 100 lbs. \$10.00).**

King of the Garden.—Very prolific; large and desirable both for the home garden and for the market gardener. **(Per pkt. 5c) (per lb. 35c prepaid) (per 10 lbs. \$1.20).**

Broad Windsor.—Grows on one upright stem with pods at every leaf, it is very prolific and quite hardy in Southern California. It is rapidly coming into favor as a table bean as it is quite delicious when properly prepared. **Prce—(Pkt. 5c) (lb. 35c prepaid) (10 lbs. \$1.75).**

If your soil is new, it needs nitrogen. If it is sandy, it needs both humus and nitrogen. The easiest and most economical way to supply both elements by one effort is to inoculate your bean and pea seed with Nitrogen-Fixing Bacteria. One fifty cent bottle will inoculate all the beans and peas usually required to plant a family garden.

About Varieties.—It has been our ambition to acquaint ourselves with the varieties of vegetables that the market gardener wants. After several years of careful attention to that purpose, we have learned that he requires sorts calculated to be more or less in season each month of the year, because the demand for table vegetables is constant the year round. If he is growing for shipping, his line will be different from that of the grower catering to the home market; if his location is in the frostless belt his selection of varieties will vary from those more adapted to lower altitudes. What is here said of the market gardener also applies to the general ranchers planting field and fodder crops. Consult us. We will advise you correctly.

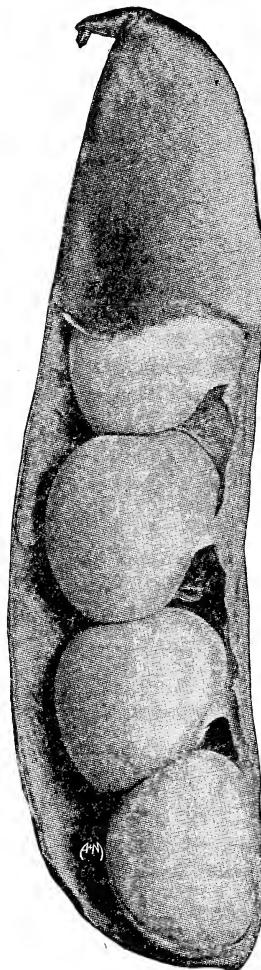


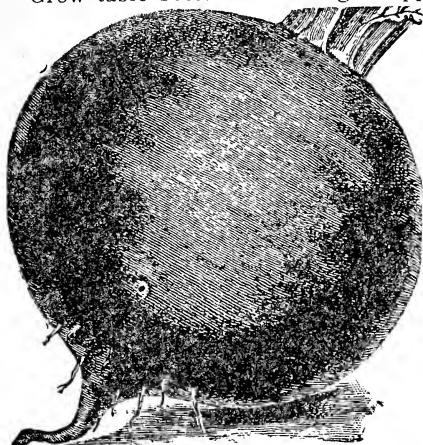
TABLE BEETS

Our Garden Manual is Free With Your First Order. Ask for It.

Culture.—Sow all the year round in drills ten inches apart on ridges (see page 29), thin out to three inches apart in the rows, or sow in plant-bed and transplant to any convenient spot in the garden. Water well once a week, keep the ground loose and the weeds out.

If the soil is in perfect condition, beet seed should germinate and show above ground within eight days. Should a rain fall and the ground become crusted, the sprout will decay. Beets are ready for table in about seventy days after planting.

Grow table beets for the large shippers. They will net you \$300 per acre.



Crimson Globe

Extra Early Egyptian.—The market gardener's favorite. On account of its beautiful appearance, earliness, and excellent flavor. (Pkt. 5c) (per oz. 15c) (per $\frac{1}{4}$ lb. 40c) (lb. \$1.25).

Early Blood Turnip.—Of large growth. Flesh very tender and retains its blood-red color when cooked. On account of its tall leaves it is a favorite summer time beet with market gardeners. (Per pkt. 5c) (per oz. 15c) (per $\frac{1}{4}$ lb. 35c) (per lb. \$1.00) postpaid.

Half Long Blood.—Smooth, growing to good size; color dark red; top small, of upright growth. (Per pkt. 5c) (per oz. 15c) (per $\frac{1}{4}$ lb. 40c) (per lb. \$1.25 postpaid).

OUR BASSANO

Our Bassano Beet excels all other varieties for table use. Its delicious flavor, entire absence of fibre, smooth symmetrical shape and small root puts it in a class by itself for all-round good qualities. The market gardeners have recognized this for years, and many will have no other. Price—(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) 1 lb. \$1.00) postpaid.

Detroit Dark Red.—This is an ideal beet for all purposes. It cannot be excelled for the table; free from all fibre and very sweet. It is the best of all for pickling. Even the tops are good when pickled. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00).

A Word to Gardeners About "Bunch Goods."

This term is applied to vegetables that are tied in bunches, viz.—beets, carrots, radishes, turnips, parsnips, bunching onions, salsify, kohlrabi, and spinach. Every one of the above are all-the-year-round vegetables, and every one may be cultivated as lettuce, (see page 29). The growing of these vegetables is not only for the Los Angeles consumption, but they are shipped with other vegetables in car loads to all parts of the United States. The tops are cut off for shipping.

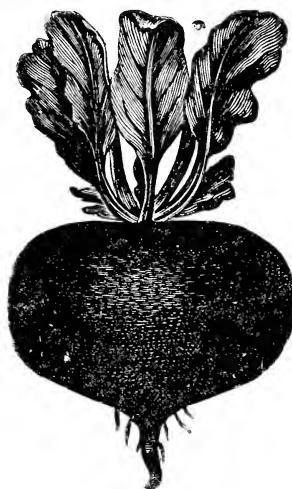
Keep in mind that Southern California is the winter garden of the United States. Therefore make your big planting of these vegetables, also lettuce, cabbage and cauliflower, in August, September, and October.

CRIMSON GLOBE BEET

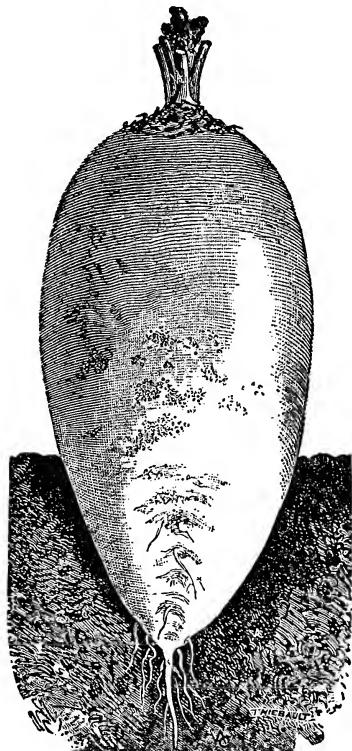
This splendid variety has now been grown quite extensively in many sections of the country and the many good reports received from old customers indicate that it gives most thorough satisfaction. It is of medium size, generally about three inches in diameter, very handsome in shape, with a remarkably smooth surface. It has a very small tap-root. Gardeners prefer it for summer planting because the large foliage protects the beet.

Price—(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00) postpaid.

Eclipse.—Is a favorite for the family garden, very sweet, tender and of fine texture. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00) postpaid.



Bassano Beet



Half Sugar Rose

See our Columbia planter, it is just the thing with which to plant beets. It will drop a definite quantity of seed the proper distance apart, thus avoid thinning out and unnecessary waste of seed.

STOCK BEETS

Write for price when a quantity is wanted.
Read inside front cover page.

Culture.—May be sown from October to May in drills three feet apart. Thin out to stand half foot apart in rows. Keep well cultivated; 8 lbs. of mangel, or 10 lbs. of sugar-beet seed will plant an acre.

HALF SUGAR ROSE BEETS

A distinct type of Sugar Beet, producing not only a good crop, but roots of giant size and richest feeding quality. It has yielded 55 tons of clean roots per acre, several tons per acre more than the heaviest producers of other sorts on the list. They have a small, clean top, and are easily trimmed. The roots are heavy, but are so easily harvested that they may be turned out by a push of the foot. The flesh is white, solid, tender and very sweet and imparts a rich, pleasant flavor to dairy products, when fed to milch cows. Our Half Sugar Rose is a profitable Stock Beet to grow. Per (pkt. 5c) (lb. 30c) (10 lbs. \$2.50).

Mr. S. Rutherford of Santa Barbara raised beets of the Long Red variety up to 115 pounds each in five months from planting.

Thirty to forty tons per acre of stock beets is no unusual yield.

Giant Yellow Intermediate.—A large variety always in favor with dairymen because it is rich, healthful to the stock, yields large tonnage per acre, and easily gathered. Price—Per (pkt. 5c) (lb. 30c) (10 lbs. \$2.50).

Klein Wanzleben—(Sugar Beet). This variety is without question the best in cultivation. Not the largest in size, but the richest in saccharine. It will fatten hogs as quickly as grain. Price—Per (pkt. 5c) (lb. 30c) (10 lbs. \$2.50).

Mammoth Long Red Mangel.—The largest Stock Beet. Yields 40 to 50 tons to the acre. Will grow in land containing more alkali than any other beet. All stock except horses eat it readily. Per (pkt. 5c) (lb. 30c) (10 lbs. \$2.50).

Golden Tankard Mangel.—Contains more sugar and less water than any other Mangel. Rich in milk-producing qualities, hence a favorite with dairymen. Horses will eat it. (Per pkt. 5c) (lb. 30c) (per 10 lbs. \$2.50).

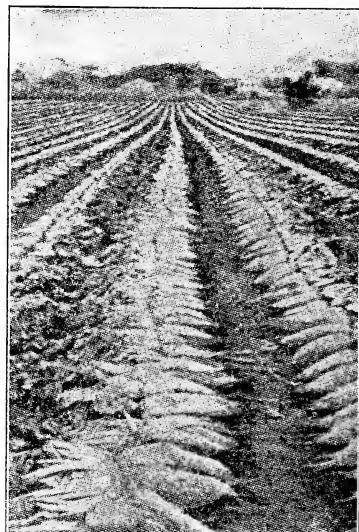
Sludstrup.—This variety is more extensively grown in Holland by dairymen than any other. Its uniform growth of large well-shaped beets rich in saccharine, its record for producing rich milk and sweet butter, has made it the popular beet of that country.

We are always on the lookout for something better to offer our trade. We are sure you will add dollars to your dairy by planting the Sludstrup.

Price—Per (pkt. 5c) (per lb. 30c) (10 lbs. \$2.50).

CASAVA (See Page 7)

A stock food new to this section but grown largely in Florida. The moist sandy loam suitable for growing celery is ideal for growing the Casava, but it will grow to perfection in light sandy soil with proper irrigation and cultivation. It is so highly recommended elsewhere it is surely worth a trial here.



Sludstrup

BROCCOLI

Culture.—Same as Cauliflower.

Early Purple Cape.—Resembles the Cauliflower, but is hardier and more easily grown. Heads purplish brown in color, always close and compact. Fine flavor. Excellent for pickling. (Per pkt. 5c) (per oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.50) postpaid.

Large White.—Tender and delicious flavor. Every home garden should include this. (Pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.50).

BRUSSELS SPROUTS

Culture.—Same as Cabbage.

A. & M. MATCHLESS

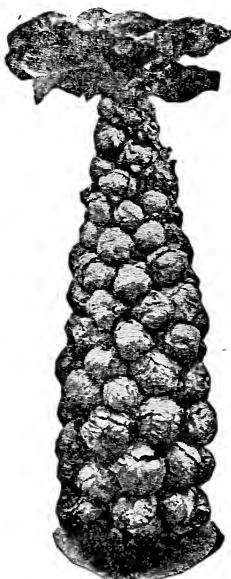
The increasing demand for this delicious vegetable of the cabbage family has spurred us on to look for something better than has hitherto been offered on this market. We have succeeded in securing a medium dwarf variety that bears larger heads, and every joint a head. Be sure to ask for the Matchless. Price—(Per pkt. 10c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (1 lb. \$2.50) prepaid.

Dwarf Improved.—Produces on the stem compact sprouts resembling miniature cabbages. A delicious vegetable; always commands a high price, because of its scarcity. (Per pkt. 5c) (per oz. 15c) (per $\frac{1}{4}$ lb. 50c) (per lb. \$1.50) prepaid.

Our seeds can be depended upon to grow because they are carefully tested before being offered for sale.

Our seeds are the best that grow because they are planted and grown especially for us, and we get the best of the crop.

For aphid, spray with Blackleaf 40.



Brussels Sprouts

Culture.—The secret to grow hardy plants is to thoroughly prepare the soil in the plant bed. Loosen the soil to a depth of eight or ten inches, pulverizing well. Sow in drills not too freely, about one-half inch deep, press the soil firmly over the seed; this is important. In about six weeks transplant in rows three feet apart, one foot in the row for Winningstadt, eighteen inches for large-heading varieties. Keep the crop well watered and cultivated for when growth is checked the seed head matures and bursts forth as soon as moisture is again applied. This accounts for much cabbage going to seed. Early varieties mature about three and one-half months after transplanting, late varieties in about five months.



Autumn King

For cabbage worm, spray with salt petre. Dilute one tablespoonful to one gallon warm water.

Scott's Cross.—See page 19.

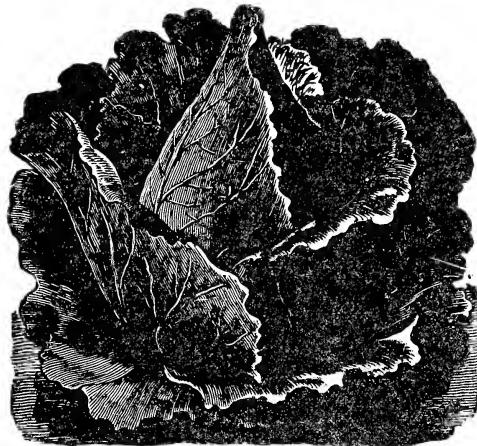
Large Late Flat Dutch.—The standard sort for late crop. A large, sure header. (Per pkt. 5c) (oz. 30c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$2.75) prepaid.

Henderson Early Summer.—A good medium-sized early flat head, very desirable for the table. (Pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$2.75) prepaid.

AUTUMN KING

For three years this Giant Cabbage has astonished all who have seen it at the market. Heads weighing from forty to fifty pounds are not uncommon. It is tender and of excellent mild flavor, ideal for sauerkraut, and it will yield more tons of good cabbage per acre than any other variety. Price—(Pkt. 5c) (oz. 30c) ($\frac{1}{4}$ lb. 90c) (1 lb. \$3.00) prepaid.

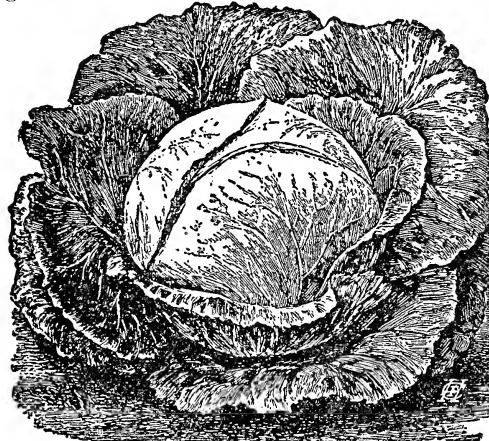
CABBAGE—(Continued)



Winningstadt

Hollander.—Is one of the best of all the hard heading varieties. The heads are thick, round, of medium size and as solid as a rock; of good flavor and heads well in our winter climate. It is a desirable sort for gardeners. Price—(Per pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.25) (lb. \$4.00) prepaid.

As both worms and aphis are nearly always present at the same time, use a combined spray prepared as follows: Black-leaf-40, two tablespoons; soap, one-half bar; arsenate of lead, four ounces; water, four gallons.



A. & M. Early Drumhead

All Seasons.—The heads are extremely solid, round, flattened on top and ready to market nearly as early as Early Drumhead, while considerably larger in size. It is called "All Seasons," because it is as good for autumn or winter as for early summer. (Per pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.50) prepaid.

Danish Ballhead.—Round and solid as a ball, tender and of excellent flavor. A very desirable variety to grow for the local market. Price—(Pkt. 5c) (oz. 45c) ($\frac{1}{4}$ lb. \$1.50) (1 lb. \$4.50).

WINNINGSTADT CABBAGE

No other vegetable listed in our catalog has retained its popularity so continuously and for such a long time as our Quedlinburg strain of Winningstadt Cabbage, introduced by us in 1896. It is now, and has been ever since that date, the most popular cabbage grown on this Coast. It is popular because it is early, solid, good flavor, sure header, and good shipper.

Price—(Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (1 lb. \$2.25) (5 lbs. \$9.00) postpaid.

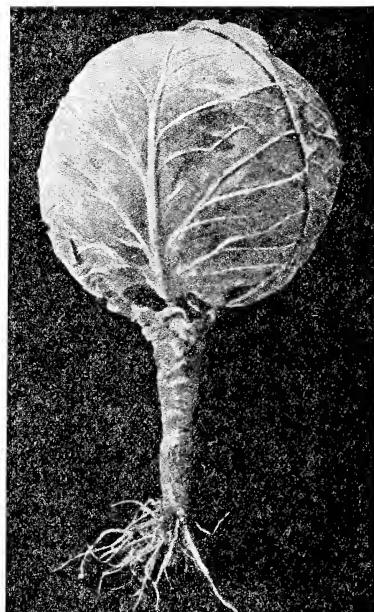
American Drumhead Savoy.—The best of all the Savoys. Short stump large size, solid head. (Per pkt. 5c) (oz. 25c) (per $\frac{1}{4}$ lb. 75c) (lb. \$2.50) postpaid.

Improved Red Drumhead.—Heads of deep color and remarkably solid. Excellent for slaw. (Pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (1 lb. \$3.50) postpaid.

A. & M. EARLY DRUMHEAD

Year by year this desirable sort becomes more and more popular. It is very early, tender, crisp, and just the right size for the dealer. Truckers like it because every stalk produces a head.

Price—(Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.25) postpaid.



Danish Ball-Head

CHINESE CABBAGE

This delicious vegetable should be more generally used. It is more easily grown than the ordinary cabbage, and when boiled with meat, it is much better than either cabbage or turnips. As a salad or cold slaw it is excellent. Every home garden should have a plot of Chinese cabbage. Grow it exactly as you do lettuce.

Price—(Per pkt. 10c) (oz. 50c) (1 lb. \$5.00) prepaid.

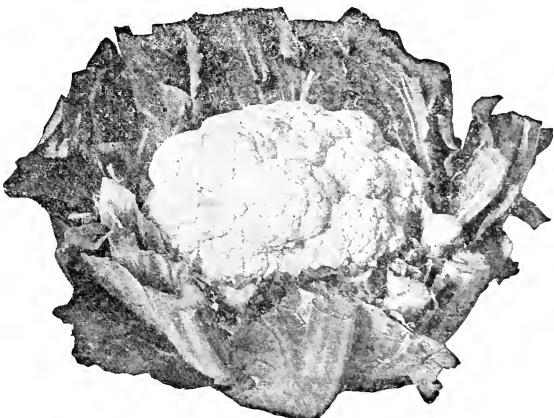
CAULIFLOWER

Cauliflower is grown in large quantities. Southern California ships five hundred cars annually from November to April during each season, and the returns are of a very satisfactory nature. The industry is on a solid basis and growing each year. Do not plant cauliflower seed between March first and June first in Southern California, as the hot weather in summer is almost sure to destroy any cauliflower that is advanced so far as to begin heading.

Culture.—Prepare the soil as for cabbage. Seed may be sown from June to the following March. Transplant when the plants are six to seven weeks old. When the stems have become hardened in the bed they will be likely to head prematurely. Set out the plants 18 inches apart, in rows of 3 feet. Cauliflower should be kept growing constantly, as it may be injured by a check in any period of its growth, and go to seed; hence, irrigate freely. One ounce of seed produces 2,000 plants; six ounces to plant one acre.



Chinese Cabbage



Extra Early Snowball

the best late variety. It should not be planted until July 1st, as it will not head up well until the cold weather of January or February. **Price**—(per pkt. 10c) (oz. 80c) ($\frac{1}{4}$ lb. \$2.50) (lb. \$8.00) postpaid.

California Mammoth.—Medium early. Is the largest variety grown anywhere in the world. It is not uncommon to attain 16 inches in diameter, while 10 and 11 inches is the average. It is of California origin. (Per pkt. 10c) (oz. \$2.00) ($\frac{1}{4}$ lb. \$6.50) (lb. \$20.00) postpaid.

Autumn Giant.—Heads large, firm and compact, thoroughly protected by foliage. Per (pkt. 10c) (oz. 80c) ($\frac{1}{4}$ lb. \$2.50) (lb. \$8.00) postpaid.

Dry Weather Cauliflower.—Dry Weather Cauliflower merits the confidence of all growers as an all year round variety. We give it special recommendation for the first early and late planting. It requires rich soil and good cultivation, but will withstand more drought than any other variety.

Price—(Pkt. 25c) ($\frac{1}{4}$ oz. 75c) (oz. \$2.50) ($\frac{1}{4}$ lb. \$8.00) (lb. \$25.00) postpaid.

CABBAGE WORMS AND CABBAGE APHIS

The best method of controlling these worms is to spray the plants before they are half grown with arsenate of lead and soap prepared as follows: Arsenate of lead (paste), three ounces; soap, one-half bar; water, four gallons. This spray should be applied whenever the worms become abundant enough to justify it.

The best method for controlling the plant lice is to spray the plants with tobacco and soap mixture prepared as follows: Blackleaf-40, two tablespoons; soap, one-half bar; water, four gallons. The soap is necessary in order to make the spray spread evenly and penetrate the mealy covering of the lice.

Extra Early Snowball.—Our seed, grown in Holland, has proven perfectly satisfactory for the past twelve years. Planted in June it can be marketed in November. It is the best early cauliflower yet offered by any seed house. We have one customer who has bought ten pounds of this seed for twelve consecutive years; it has never disappointed him. He grows it in peat land and always plans to market his crop from November 20th to January 1st.

Price—(Pkt. 25c) ($\frac{1}{4}$ oz. 75c) (oz. \$2.50) ($\frac{1}{4}$ lb. \$8.00) (1 lb. \$25.00) postpaid.

California Pearl.—For further description see Novelty page 19.

Improved Algiers.—Next to California Pearl this is probably

CARROTS



Early
Gem

Guerande, or Oxheart.—Beautiful shape and color. The roots generally attain four or five inches in length and about three inches in diameter. Quality first rate, very tender, like the Early Gem, is the market gardener's favorite.

Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) postpaid.

Early French Forcing.—A small sort, but desirable on account of its extra early habit. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) postpaid.

Danvers Half Long.—The roots are smooth and of a rich, dark orange color. One of the best sort for a main crop. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) postpaid.

Chanteney.—Flesh is a deep golden orange color, always smooth and fine in texture, very tender. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) postpaid.

Improved Long Orange.—A deep orange colored variety adapted for farm or garden culture. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00) postpaid.



French Forcing

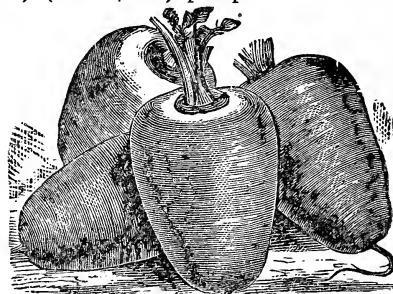
Plant the Early Gem Carrot by the acre for the shippers. One acre will yield 600 sacks and should sell for 75 cents per sack.

When in doubt about seed selections consult with us.

Culture.—May be sown all the year round. Till the soil deeply and manure heavily. Cover seed from one-half to one inch in depth. Sow in drills ten inches apart on ridges (see page 29) and thin out to two inches apart. Four pounds of seed will sow an acre; one ounce to 100 feet of drill. Carrots are ready for use in eight weeks after planting, and remain edible for six months.

A. & M. Early Gem.—Somewhat resembles the Guerande or Oxheart, but is more uniform in shape, of finer texture and almost entirely free from the core usually found in other varieties. Flesh deep red, very tender and delicious in flavor. The roots generally attain from four to five inches in length and about three inches in diameter, although they have been grown to nearly double these dimensions. For bunching, the handsome appearance is a marked advantage over all other varieties. It is a favorite with many market gardeners.

Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) postpaid.



Oxheart Carrot

Half Long White Belgian.—Is raised exclusively for stock. Grows to a very large size; is easily gathered. Makes splendid feed for cattle, horses and hogs. Known to yield forty tons per acre. Will keep four or five months after pulling. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c) postpaid.

Large Yellow Belgian.—Is similar to the above, but with a light orange color; said to be richer, but does not keep so well. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c) postpaid.

Half-Long Giant White.—The largest of all stock Carrots, and desirable because it does not grow to a great depth, and although six inches in diameter, there is no hard core. Price (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c) postpaid.

Mastedon (Cow Horn).—Desirable because it stands well above ground, thus being easily harvested. Although six inches in diameter, there is no hard core. We give the Mastedon special recommendation to dairymen. Price (pr pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c).

CELERY

Culture.—Sow the seed from Jan. 1st to April 1st, in drills six inches apart, not too thick in the row to secure stalky plants. In June when the plants are strong, transplant to furrows four feet apart and six inches deep. Set the plants six inches apart in the furrows, as the plant grows fill the earth toward the plant to secure proper bleaching. Never allow dirt to rest on the heart of the plant. Never work in celery when it is wet with rain or dew.

Giant Pascal.—It is a green top, much superior to the California green top. It is a great favorite in the eastern gardens. Price—(Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 85c) (lb. \$2.50) postpaid.

California Giant White Plume.—We have now the grandest strain of White Plume Celery ever offered to the market gardener. It is indeed a curiosity to all visitors to the market, as you will believe when you know a bunch of 12 stalks weighs 64 pounds, is solid and crisp with a decidedly salty flavor derived from the alkaline soil in which it was grown. On the peat lands it attains its highest perfection. (Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.00) postpaid.

PARIS DWARF GOLDEN SELF BLANCHING

This is the variety so extensively grown in the peat lands of Southern California for the Eastern market. It withstands the cold winters much better than the White Plume variety. It is a nice size for crating and its rich golden yellow makes it desirable for the market. Our seed is imported and has given entire satisfaction the past twelve years. It is reliable. Price—(Pkt. 10c) (oz. \$2.50) ($\frac{1}{4}$ lb. \$8.00) (lb. \$25.00) postpaid.

Flavoring Celery.—Per (lb. 50c) postpaid.

Smooth Prague, Celeriac.—A large celery flavored root used extensively for flavoring soups, pickles, etc.; also relished sliced as a salad with pepper and vinegar. It is also used to flavor chicken and potato salad. (Per (pkt. 5c) (oz. 20c).

From C. C. Lee, New Mexico: "I have found your seed to be the best planted this year. Have seven thousand celery plants ready to transplant from 2 oz. of Dwarf Celery Blanching."

PROFIT FROM VEGETABLES

Truck Farmers Near Town Have Big Advantage in Retailing

Since the establishment of municipal markets in various cities and the removal of a peddler's license to the producer, the retailing of fresh vegetables and small fruits, poultry and dairy products. The road to success depends largely upon the small farmer living on a good wagon road, within five miles of a flourishing town or village, can build up a profitable trade for all he can produce of fresh vegetables, fruits, poultry and dairy products. The road to success depends largely upon the ability of the grower to furnish a good article in season, give honest measure and to have polite, obliging manners. Politeness, honesty and quality of produce goes a long way in making and holding custom. Vegetables for the retail trade may be allowed to become fully ripe; for the wholesale market they must be gathered when not quite ripe. Cabbage, turnips, beets, carrots and salsify roots gathered fresh from the garden are tender and well flavored. Any one accustomed to eating freshly gathered vegetables will readily give an extra price for such. Farmers far from market should grow only those vegetables and fruits that are best suited to their soil and climate and are in constant demand and less perishable. It is best to study the market, to consult commission merchants, and also the experienced seedsmen. The retail trade is the most profitable as just double prices can be had for nearly everything.

GOOD WORK APPRECIATED

Nowhere is there such need for competent seedsmen as in Southern California, and, indeed, throughout the Southwest. This arises from the great diversity of soil, which is classed as sand, loam, and adobe, with every intermediate degree, also every stage of moisture and alkali, from dust to a Tule swamp, and climate from the low salt sea air to the frosty altitude and down again to the dry desert air of Death Valley, each zone requiring different varieties and culture. For information of any kind pertaining to the ranch, write us.

Fertilizer for every purpose. See our list.



SWEET CORN

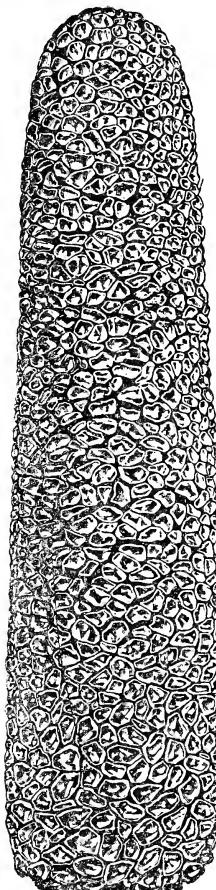
**Our Tested Seeds Grow and are True to Name
(Write for quantity price)**

Culture.—Plant from February 15th to September 1st in hills 18 inches apart, in rows three feet apart. Allow two stalks to the hill, break off all side shoots; cultivate after each irrigation until the corn shades the ground; irrigate every two weeks until in the milk, then once or twice a week, and this will produce a solid, tight husk, which will prevent the worms from doing much damage.

Our Oregon Evergreen.—See novelty, page 20.

A. & M. Early Adams.—See novelty, page 20.

Country Gentleman.—A delicious sweet corn. The ears are somewhat smaller and less showy than the coarser varieties, but for private family use, where quality is preferred to size, it is excelled only by the Golden Bantam. The cob is very small, giving great depth to the kernels. The great merit of "Country Gentleman" is its fine quality. It matures in ten weeks. Price—(Per pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).



**Country Gentleman
Corn**

Extra Early A. & M. Evergreen.—Our eastern grower of corn seed recommends this so highly we have decided to give our customers the benefit of any advantage in earliness: this variety may have over the old favorite. It has all the sweetness, size and quality of the Stowell's with the advantage of being earlier.

Price—Per (pkt. 5c) (lb. 25c prepaid) (10 lbs. \$1.25).

Large Adams.—This is the best market variety to plant in August and September for late crop. It will mature in 56 days. Price—(Pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Stowell's Evergreen.—If planted at the same time with earlier varieties and at intervals of two weeks until July 1st, it will keep the table supplied until November. It is hardy and productive, very tender and sugary, remaining a long time in a fresh condition suitable for cooking. (Per pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Early Minnesota.—An excellent sweet corn of extra early habit. Per (pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Early Crosby.—Second early. Remarkably productive grower with good-sized ears. Per (pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Early Mammoth.—Produces the largest ears of any early sort. Per (pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Late Mammoth.—One of the finest varieties for main crop. Good quality, very productive. Desired for the home garden, but the husk is too thin for the market. (Per (pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Black Mexican.—One of the best sweet corns for this section. Deliciously sweet and tender and very productive. Per (pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Golden Bantam.—Probably the very earliest variety grown. Very sweet, none better for the home garden for first early. Per (pkt. 5c) (1 lb. 30c prepaid) (10 lbs. \$1.50).

White Mexican.—Has all the good qualities and sweetness of the Black Mexican, but more desirable for the table because it has a pure white grain. (Pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$1.25).

Hints to the Market Gardener.—Plant Early Adams in February. Plant Oregon Evergreen every two weeks from March 1st until August 1st. From August 1st until October 1st plant Large Adams. For the home garden plant Country Gentleman and Golden Bantam every two weeks from March 1st until October.

See Field Corn and Forage Plants READ THIS

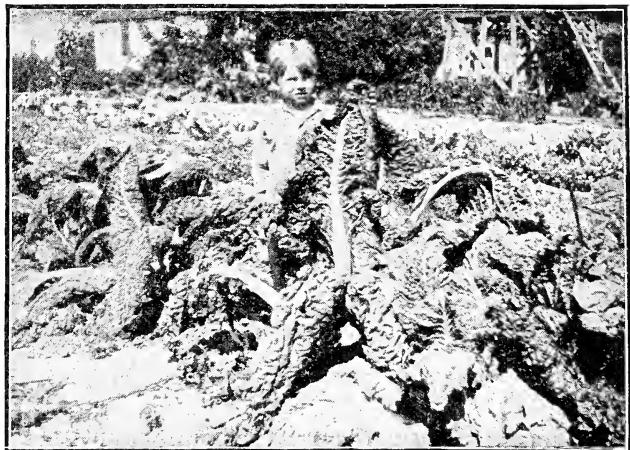
On these pages we have listed more than one hundred items essential to the nursery, the ranch and the garden, but we have not listed nearly all of the many items that we have on hand,—only the ones that we give our special endorsement. If you want anything not here listed, write for it.

We here wish to give special recommendation to the Segment Corn Planter, the Master's Transplanter, the Lowell Sprayer, the Continuous Sprayer, the Vermorel Sulphuring Machine, and the Gopher Smoker. If you need any of these, do not hesitate to purchase. They are all right.

CHARD

White Swiss Chard.
—Grown for its leaves only; one of the best early greens. Cook the leaves as you do spinach and the stems in cream as asparagus. Leaves grow to enormous size, 20 inches to 2 feet in length. The plant is almost perpetual if kept trimmed, but it is better to have a new crop every year. Larger leaves make it a desirable plant for poultry greens; much more desirable than alfalfa, because it can be grown with less care and in any convenient place about the premises. Try it for your hens.

Price—(Pkt. 5c) (oz. 10c) (per $\frac{1}{4}$ lb. 30c) (per lb. 85c).



A Row of Chard

CHAYOTE

The Chayote is fast becoming popular because of its luxuriant rapid growth and its fruit, which is quite edible when parboiled, chopped and cooked with tomato and green pepper, or fried as egg plant, or prepared as squash.

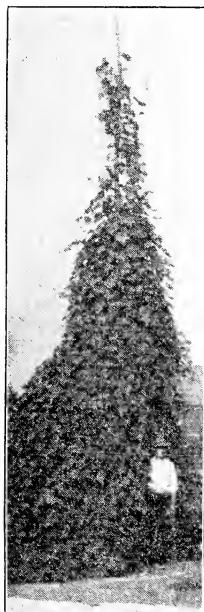
Culture.—Cover the large end leaving the small end above the surface. In this way large roots are grown before the sprout appears above the soil.

The vine is desired for the arbor or any place where shade is wanted quickly. It will grow forty feet long the first season and bear an abundance of fruit in October. Frost will destroy it to the ground, but it soon starts to grow and will extend possibly 100 feet the second season. One fruit envelopes one seed, and because of frequent failures to get the plant started, we have them already rooted.

Price—(Per Chayote 15c) (by mail 25c) (rooted 20c each) (by mail 30c).

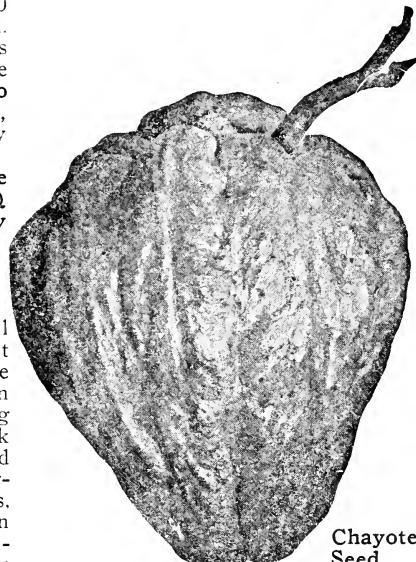
RECEIPTS FOR COOKING

Peel and halve, boil in with your roast same as potatoes. Make same as scalloped corn or potatoes, by slicing and baking in milk with butter; salt and pepper to taste. Parboil about ten minutes, then put into the oven and bake twenty minutes, or until tender; eat with butter, salt and pepper. Cut in small slices and boil in salted water; add tomato sauce and chili peppers to suit taste.



Chayote Vine

This vine grew to the top of this forty-foot pole. Had it grown on the ground it would have covered an area eighty feet in diameter. 320 fruit was gathered from this vine.



Chayote Seed

CHICORY

Large Rooted.—The roots, dug in the fall, dried, cut in thin slices, roasted and ground, are used largely as a substitute for coffee. Seed should be sown quite thinly in shallow drills early in the spring. When well started, thin out to stand two or three inches apart in the row, and give good cultivation all summer..

Price—Per (oz. 10c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25) postpaid.

CRESS

Culture.—Sow curled or pepper grass thickly, in shallow drills, every two or three weeks. It should be cut often, it will continue to grow. It is used not only for salad, but for the breakfast table and for garnishing.

True Water Cress.—Should be sown in damp soil or if a stream of water can be utilized, it would be much better. It will also thrive well in damp cold frames. Rightly managed, its culture is very profitable. (Per pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.50) postpaid.

Pepper Grass—(Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c).

Corn Salad.—Excellent for greens. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c) postpaid.

COLLARDS

The Collard is an old-time favorite, adapted to all parts of the South, and as a producer of "greens" for boiling in winter and spring it has no equal. It will pay you to have a collard patch just to feed the chickens.

Southern Georgia.—This variety is the old-time favorite. Stands all sorts of adverse conditions without injury. Is very hardy. In many places where the soil is too poor to grow cabbage, the collard grows easily and make a good substitute for cabbage. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. \$1.00) postpaid.

For particular information, address a letter to us asking what you wish to know. Too many failures are the result of following a general rule that does not apply to your particular condition. Write us and avoid such failures.

What and when to plant, see inside of back cover page.

Superior stocks are necessary to the prosperity of the market gardener. The inferior article may be more attractive at the beginning, because it costs less, but the superior seed gives the most valuable product. You are bound to get the best vegetables from our seeds. We sell to market gardeners who must have only the best. No other seed house on the Pacific Coast caters to the market gardener as we do. The cheapest is never the best. The best is always the cheapest. Plant Aggeler & Musser's Reliable Seeds and insure success.

Culinary Plants and Roots

(Prepaid)

Asparagus	1 doz. 30c	Rhubarb	1 root 15c
Cabbage	1 doz. 15c	Sweet Potato	50 plants 50c
Cauliflower	1 doz. 20c	Tomatoes	1 doz. 15c
Horse Radish	1 doz. 20c	Chives	1 clump 10c
Pepper	1 doz. 20c	Egg Plant	each 5c

We aim to have plants of the above named varieties and others in season. Write for what you want, and if we do not have it in stock we will endeavor to get it for you. We have successfully shipped thousands of sweet potato plants by mail; it is more expensive than by express except when delivery is made by rural route.

When ordering, give full directions and send sufficient money. We will not send plants otherwise. There is too much uncertainty about time of delivery.

"My sweet potatoes have turned out fine. I got the slips from your house, and we are turning out from 5 to 12 lbs. to the hill." R. H., Greer, Cal.

TESTED SEEDS ARE RELIABLE

We not only test our seeds for vitality, but we grow our leading vegetables to maturity to know they are true to name.

Testimonials: "The seeds you sent me came in due time. I sowed them and I think every seed must have come up. I can not say enough in praise as to the fertility of your seeds." Mrs. A. J. Savory, Bowles, Cal.

Notice—Read inside front cover page, the information to be found thereon is important. Read page 29, it will prove helpful to you. On pages 4 to 29 you will find descriptions of many new and valuable plants and bulbs that are worthy of trial.

CUCUMBERS

Try our Telegraph Davis cucumbers; see page 21.

Lemon Cucumbers.—See page 21.

Culture.—See page 29. Plant from March to September in hills 4 to 6 feet each way, 8 to 10 seeds in a hill. Cover half an inch deep. When danger of insects is past, thin out the plants, leaving 5 or 6 of the strongest in each hill. It is ready for the table in six weeks from planting seed. One ounce of seed will plant 50 hills; two pounds to the acre.

Klondike.—We first catalogued this cucumber five years ago, with the result that it proved highly satisfactory. It is very similar to the Long White Spine. Many gardeners insist that it is better. Gardeners prefer it because of its dark green color and medium size. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.25) (5 lbs. \$5.75) postpaid.

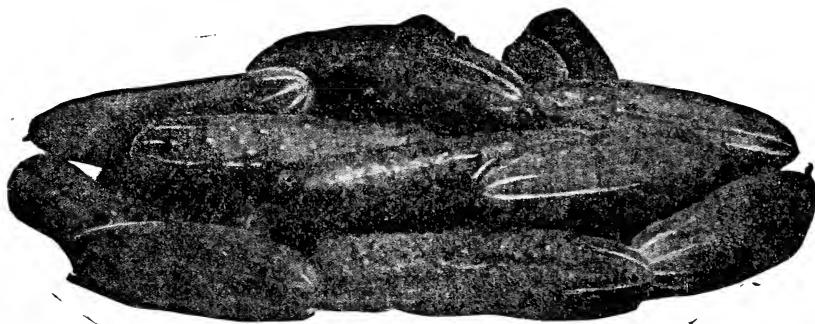
Arlington White Spine.—This is a favorite for early forcing outdoors. We have a special strain of this variety. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.25) (5 lbs. \$5.75) postpaid.

Improved Long Green.—Dark green, firm and crisp, 12 to 16 inches long. Very extensively grown. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.25) (5 lbs. \$5.75) postpaid.

Chicago Pickling.—This is without doubt the best variety for pickling on account of its fleshy crisp and excellent flavor and productiveness. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00) (5 lbs. \$4.50). postpaid.

Gherkins.—For pickling. (Pkt. 5c).

ITALIAN CUCUMBER.—**The Prize Winner.**—This is the largest of all cucumbers, often thirty inches in length. Should be used when quite young; it then has an excellent flavor. (Pkt. 10c).



Davis Perfection White Spine

Davis Perfection.—This is the ideal cucumber. Long, slender, dark green, tender and crisp. It is the best all around cucumber yet offered for the family garden, the market garden and the hot house. Do not hesitate to plant this variety, whether you plant a dozen hills or a larger acreage.

Price—(Per pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 60c) (1 lb. \$1.75) (5 lbs. \$7.50) postpaid.

Japanese Climbing Cucumber—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (lb. \$1.50) postpaid.

A WORD ABOUT CUCUMBERS

Few vegetables are more profitable if you can produce them during the winter months. This can be done in a hot house or cold frame on a Southern exposure. The cold frame should be covered at night with muslin. In this way they can be marketed as early as May 1st. Planted from September 1st to 15th, in a sheltered place, will produce delicious cucumbers all through December and late into January. This has been done frequently, but so much depends upon the changeable climatic conditions each season that there is always a risk of failure, but it is worth a trial because the expense is small compared with the profit if you succeed. Six hundred dollars from one acre of cucumbers during the month of December is easily possible.

To prolong the vitality of your vines, pick all of marketable size every other day, and do not tread upon the vines when picking. To grow prize cucumbers, mix one-fourth pound of Wizard Fertilizer with the soil about the hill when planting, and more as the vine grows.

What to plant, when and how to plant it, see inside back cover page.

P. S.—The Davis Perfect White Spine Cucumber has met with the approval of everybody up here. Say there is nothing like it anywhere. Amos M. Smead.

ENDIVE

Culture.—Seed may be sown any time during the year. When plants are well started, thin out to ten inches apart, or they may be transplanted. When plants have reached a good size, gather the leaves closely together and tie loosely in an upright bunch. This blanches the inner leaves in about ten days and adds to the crispness as a salad, as it renders the flavor mild and delicate. One ounce will sow 100 feet of row.

This plant furnishes an attractive and appetizing salad for the fall and winter months, or by repeated sowings a supply may be had nearly all the year round.

Green Curled.—Leaves are finely cut or lacinated, giving the plant a rich, mossy appearance, which is greatly enhanced when the centers are nicely blanched.



Green Curled Endive

This is the variety generally preferred because it blanches to a beautiful golden yellow. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25) postpaid.

White Curled.—This beautiful variety does not need blanching to prepare it for use, the midribs being naturally of a pale golden yellow, the finely cut and curled leaves are almost white. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) postpaid.

Batavian or Escarol.—Forms large heads of broad, thick leaves, which can be blanched for a salad or it will make excellent cooked greens, as well as being useful to flavor soups, stews, etc. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25) postpaid.

EGG PLANT

Culture.—Egg plant seed germinates slowly and should be started in a hot bed. The soil should be one part leaf mold and one part sandy loam. It is important to secure a rapid and continuous growth. Set thirty inches apart, pinch off the larger leaves when transplanting.

New York Improved.—This variety has superseded all others, both for market and home use. The large size and high quality of its fruit and its extreme productiveness make it the most profitable for the market gardener. It is spineless, which is a great advantage in shipping. (Per pkt. 10c) (oz. 40c) ($\frac{1}{4}$ lb. \$1.25) (lb. \$5.00). Postpaid.

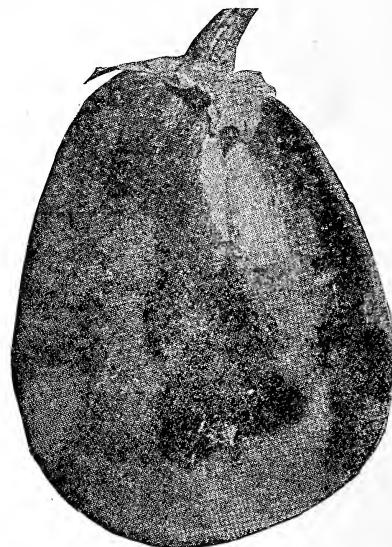
Black Beauty.—Fruit large, symmetrical in shape and uniformly of a rich, dark purple color. Fruit matures a little earlier than our Improved Large Purple, but is not quite as large. (Per pkt. 10c) (oz. 50c) ($\frac{1}{4}$ lb. \$1.50) (lb. \$5.00). Postpaid.

The Tree Egg Plant.—This variety is of medium size and extremely good shape, being particularly adapted to slicing, as there is no waste of material. It resists drought and bad weather to a wonderful degree, partly on account of its strong, upright growth. It bears its eggs or fruit sometimes one or two feet above the ground, thus escaping liability to rot. (Per pkt. 15c) (oz. 50c) ($\frac{1}{4}$ lb. \$1.50) (lb. \$5.00). Postpaid.

NOTICE:—Although frost may destroy the plant to the ground, it will sprout again from below the surface of the ground and produce an early crop the second season. Do not destroy your field because it has been frosted.

This book contains much valuable information; keep it. If you have not already received our garden manual, write for it.

Read inside front cover and pages 1 and 29. Use Wizard Fertilizer for all vegetables at the rate of two pounds to one hundred feet of row. There is nothing cheaper or better.



New York Egg Plant

GOURDS

Culture.—Gourds are tender annuals, of trailing or climbing habit. The seed should not be planted until the ground is warm. Plant in hills and cultivate as cucumbers. Leave only three or four plants in a hill, and allow the vines to ramble or train over a trellis.

Dish Rag Gourd.—The peculiar lining of this valuable gourd gives it its name. The fruit grows about two feet long. The interior membrane is serviceable for a variety of household purposes, being used as a dish cloth, or sponge. The fibre is tough, elastic and durable. Start seed under glass in the North. (Per pkt. 10c).

Orange or True Mock Orange.—A good old sort, the fruit often finding its way into the family sewing basket. A beautiful and rapid climber, quickly covering trellises. Fruit the size and shape of an orange. (Per pkt. 5c) (oz. 15c).

Dipper.—A well known and useful gourd. When grown on the ground the stem is much curved; but on a trellis the weight of the fruit makes the stem or handle straight. This gourd is very much in demand. (Per pkt. 10c) (oz. 25c).

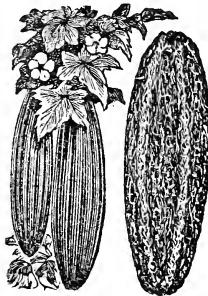
Nest Egg.—Per pkt. 5c.

Ornamental.—Small, odd shapes and colors. Per pkt. 10c.

Mixed Gourds.—Per pkt. 5c.

Sugar Trough.—Large bowl shaped; used extensively by the native Hawaiians for culinary purposes. Per pkt. 10c.

South African Pipe Gourd.—When not trellised they grow with a uniform curved neck forming a pipe shaped gourd that colors like a meerschaum and is as useful Pkt. 10c.



Dish Rag Gourds

HERBS

Pot, Culinary and Medicinal

Herbs in general, delight in a rich, mellow soil. Sow the seed any time throughout the year, in shallow drills one foot apart; cover lightly with fine soil, and when up a few inches, thin out to proper distances apart, or transplant into prepared beds. Care should be taken to harvest properly; do this on a dry day, just before they come into full blossom. Dry quickly in the shade, pack closely in bottles or dry boxes to exclude the air; this will insure their being preserved in good condition for future use. Varieties in the list marked * are perennials.

Other Leading Varieties

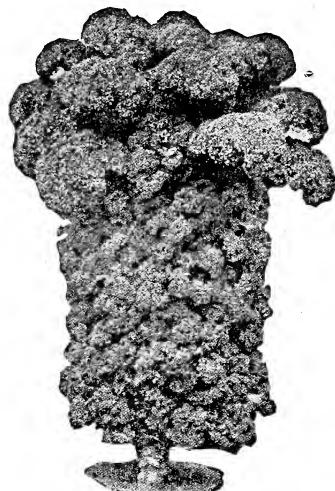
	Pkt.	Oz.		Pkt.	Oz.
Anise	5c	10c	*Lavender, Sweet	5c	10c
*Balm	5c	10c	*Peppermint	10c	...
Borage	5c	10c	*Rosemary	5c	25c
Burnet	5c	10c	Sage	5c	10c
*Caraway, fb 50	5c	10c	Saffron	5c	10c
*Catnip or Catmint	5c	10c	Summer Savory	5c	10c
Chervil	5c	10c	Sweet Marjoram	5c	15c
Coriander, fb. 50c	5c	10c	Sweet Basil	5c	10c
Dandelion	10c	50c	*Thyme	5c	25c
Dill	5c	10c	*Winter Savory	5c	15c
*Fennel, Sweet	5c	10c	Wormwood	5c	...

The supply of Culinary plants and herbs has not held up with the demand. There is room for a specialist in this line.

READ THIS

This Catalog comprises a list of all vegetables and farm seeds offered by us, all of which have been tried and proven to be adapted to climatic conditions of the Southwest and Mexico. BUT always have in mind, each season, even each month requires not only different varieties of seed but different strains of the various varieties. For instance, New York Special Lettuce is the best of all when planted from August 1st to February 1st, but planted at other times is very inferior while Marblehead and Iceberg Lettuce are best suited to the Summer months. This applies only to the climate of the Southwest. These varieties do not grow profitably in the East. What is true of lettuce will apply also to potatoes, beans, melons, onions and many other vegetables.

It is our knowledge of these conditions and our eagerness to impart this information through these pages that makes this catalogue more valuable to the gardener and rancher of the Southwest and Mexico than any other.



Tall Kale

KALE

Culture.—Seed should be sown thinly in drills about the middle of June for the tall sorts; transplant the young plants twelve inches apart in rows three feet apart. Later in the season the dwarf sorts may be sown rather thickly in drills to furnish small heads to be cooked like spinach during the winter months. One ounce to 100 feet of drill.

Dwarf German Kale.—German Green or Sprouts. The leaves are curly, bright green, very tender and delicate flavor. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

Tall Green Curled Scotch.—This makes a beautiful plant, about two-and-a-half feet tall. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

Jersey Kale.—A tall variety with smooth leaves. Especially used for poultry greens. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00). Postpaid.

Thousand Headed Kale.—Excellent for the table and for poultry greens. (Pkt. 5c) (oz. 10c) (lb. \$1.00). Postpaid.

KOHL RABI

Culture.—Seed may be sown every month in the year. Drill on ridges same as beets. (See page 29). Thin to three inches apart. An ounce of seed will produce 2,000 plants.

Early White Vienna.—The earliest sort, very tender, excellent for table use. (Per pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (1 lb. \$2.00). Postpaid.

Early Purple Vienna.—Similar to above, but has flesh of purple color. (Per pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (1 lb. \$2.00). Postpaid.



Kohl Rabi

LEEK

A. & M. Prizetaker

We believe in having the best of everything. With this idea always before us, we have secured this fancy strain of leek. It is large, white, tender and mild—the best in the world.

Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (1 lb. \$2.00). Postpaid.

A Word About Our Garden Manual.

The very commendable common sense system now adopted by many schools throughout the Southwest has suggested to us the idea of giving to the teachers and the pupils the benefit of the knowledge gathered in our twenty-two years of experience with gardening in the Southwest. We have therefore put into brief form but comprehensive information suitable to the requirements of pupils in their garden work as beginners.

The manual is now being distributed in many cities without charge to all pupils of appreciable age. We want all pupils of such age in all schools of the great Southwest from California to Texas, Nevada and Utah to have this manual. Let every teacher or school director who sees this article write us stating how many books are needed for their respective schools, and they will be forwarded free of all costs. This book is as valuable to the newcomer and the beginner as it is to the pupil, and they are just as welcome to it if they will but write for it.

Page 29 of this catalog gives an idea of the contents of the Manual.

POULTRY DEPARTMENT

You will be interested to know the extensive line of incubators, brooders, supplies, poultry foods and remedies that we offer in these pages. If you want information concerning poultry and poultry supplies, write us. See later pages of this catalog.

Also note the extensive list of garden tools, orchard and farm requisites, fertilizers, insecticides and sprayers. Everything for the ranch and garden, with instructions from planting of seed to marketing the crop.

Write for particular information.

LETTUCE

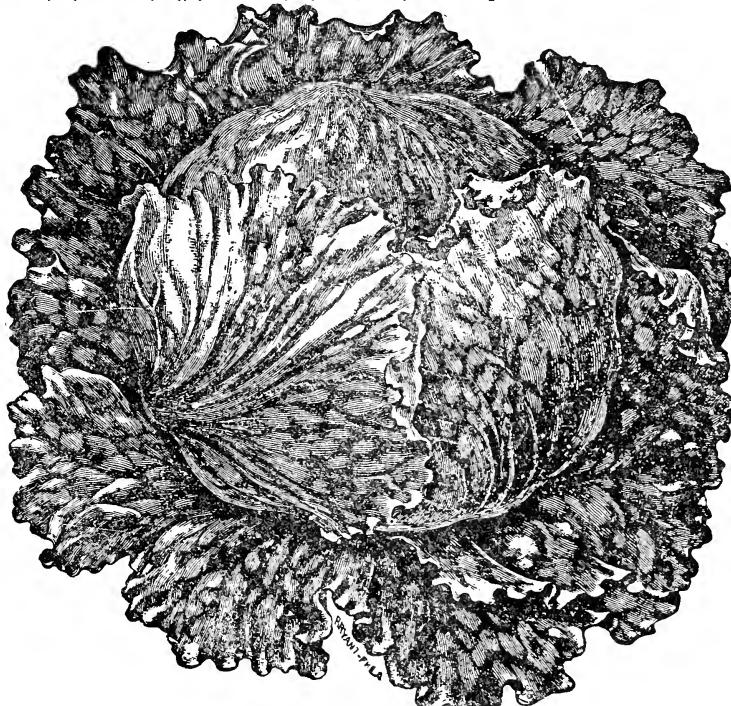
Curled Leaved Varieties

Culture.—Lettuce can be sown all the year round. All varieties attain their highest perfection during the months from November 1st to June 1st. It requires about three and one-half months from seed to maturity. Smooth leaved varieties seem to head better during the summer months, than the curled varieties. To attain the best results, lettuce requires a very loose, rich loamy soil. Planted in double rows, on ridges about 15 inches apart (See page 29) 10 inches apart in the row. Irrigate not less than once a week during the dry season. Be sure to cultivate after each irrigation. Use Wizard Fertilizer.

Marblehead.—See novelty page 22. **New York Special.**—See novelty page 22.

New York.—Darker green than New York Special with heads more rounded and leaves curled above the head, affording protection against frosts. It is one of the best varieties to plant from September 1st to February 1st. **Price**—(Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 80c) (1 lb. \$2.50). Postpaid.

Wonderful or Los Angeles Market Lettuce is large, crinkly and of delicious flavor; dark green foliage, but blanched heart and extremely solid. This variety should be grown in winter time only. Sow the seed any time from September 1st to February 1st. (Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 80c) (lb. \$2.50). Postpaid.



Wonderful Lettuce

Iceberg.—Large curly leaves of bright, light green, with a very slight reddish tinge at the edges. It has a delicious flavor. This is the best variety for a summer crop. (Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 60c) (lb. \$1.75) (5 lbs. \$8.00). Postpaid.

Iceberg lettuce should not be planted on sandy soil during the summer months, because the refraction of the heat from the soil blights the under leaves, often to the heart of the lettuce.

Black Seeded Simpson.—This is a very popular variety as a loose leaf lettuce. The leaves are large, thin, very tender and of very good quality. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00) (5 lbs. \$4.50). Postpaid.

Hanson.—Similar to the Iceberg, without the tinge of red. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25) (5 lbs. \$5.75). Postpaid.

Denver Market.—One of the largest of the curled leaved varieties. Heads are not solid, but of very excellent flavor. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00) (5 lbs. \$4.50). Postpaid.

The Columbia Planter is just the right thing for sowing lettuce seed. It will pay for itself the first season in the saving of seed and labor of thinning.

LETTUCE—(Continued)
Smooth Leaved Varieties

California Cream Butter.—This lettuce is similar to the Big Boston. It is the best for shipping. One gardener sold from one-half acre of this lettuce nearly three hundred dollars' worth. It is of good flavor and beautiful in appearance. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. \$1.00) (5 lbs. \$4.50). Postpaid.

Tennis Ball.—Similar to the California Cream Butter, except in size and without the tinge of red. It forms a solid head and is best for early spring. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00) (5 lbs. \$4.50). Postpaid.

Big Boston.—Very large, smooth-leaved solid-heading variety; grown more extensively throughout the east and south than any other. It is congenial to all climates, and while a fairly good shipper, it cannot compare in this respect with the solid-heading New York Special variety, but in flavor it probably excels all others.

An excellent all year round lettuce.

Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25) (5 lbs. \$5.75).



Big Boston



Paris White Cos

Paris White Cos.—Upright, crisp and tender. Cos lettuce is becoming deservedly popular, and should receive the attention of market gardeners. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.25) (5 lbs. \$5.75). Postpaid.

A WORD ABOUT LETTUCE

When we introduced the NEW YORK Lettuce in 1902, it at once became popular with the growers because of its large solid heads of good crisp nutty flavor. The peddler and the consumer soon got the habit of asking for it. At that time the shipper paid no attention to lettuce, but the popularity of this variety extended beyond the mountains far into the desert and beyond, first to Salt Lake, then to Chicago, and today hundreds of carloads are being shipped to all large centers as far east as New York and

Boston. Fully one thousand carloads will be shipped out this season, netting the grower about \$300.00 per acre.

A Little Hint to the Newcomer

You have purchased your land, but you are all at sea about seasons. What to plant and when to plant it is a puzzle; just turn to the inside of the back cover of this catalog, and you will find the answer. But that is not all; you want more advice. Well, just write us, stating the nature of your ranch with regard to the following conditions,—sandy, loam, adobe, swamp, mesa, foothill, irrigation, acreage, and proximity to market, are you a gardener or ranches. We may tell you to plant table peas in the fall from September to November. When they are marketed plant melons, blackeyes, or corn (as your conditions may suggest). When this crop is harvested plant potatoes. Thus you will have three crops in fourteen months. Such information is often a surprise to the newcomer, but the great Southwest is full of surprises and great possibilities.

CASABAS

(If interested write for our Casaba circular.)

The casaba is now at full zenith of popularity. Previously it was grown as a late melon to mature after the cantaloupe season. As a late melon its popularity was confined to a limited section near the Coast of Southern California. But it is now demonstrated that it can be grown in all semi-arid sections side by side with the early cantaloupes and watermelons. The carloads of large perfect casabas of the Winter Pineapple, Golden Beauty and Improved Hybrids, types that were shipped from the Imperial Valley during the past two seasons, have proven the value of the casaba as an early melon and good shipper equal to the watermelon and cantaloupe. Casabas are shipped to Los Angeles and San Francisco without crating, as are watermelons.

Our prophecy made more than ten years ago is now fully realized. We then stated that casabas would be shipped to Eastern markets in carloads, becoming one of California's many commercial products of great value. Stanislaus, Imperial and Los Angeles Counties are most conspicuous as shipping centers. Approximately one thousand carloads have been shipped from these points last season. One company operating in the San Fernando Valley sent one shipment of 500 crates to Eastern cities via Panama Canal.

Cultivate the same as muskmelons. Plant according to your locality, from February 15th until July 15th; for late shipping June 1st to July 15th seems to be the best time for planting.

Casabas may be taken from the vine as soon as they lose the green luster, but should not be eaten until the hard rind of the Pineapple and Golden Beauty will give slightly under pressure, but the Hybrid is not at its best until the thumb can make an impression as in a mellow apple.

The best way to keep the casaba late into the fall is to gather them together on the hill and cover them completely with the vines, but do not pick them off the vine.

The casaba can be grown successfully throughout the Southwest.

Mr. John H. Nusbaum, of El Paso, Tex., writes: "I had good success and ready sale for the Golden Beauty, Santa Claus, Improved Hybrid and Winter Pineapple."

Jenny Lind Casaba.—See page 23.

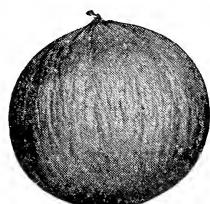
A. & M. Improved Hybrid.—See page 23.

A. & M. Hybrid.—(Read the above remarks). This is a cross between the Winter Pineapple and the Montreal Muskmelon. It grows to very large size and is of delicious flavor. It is a rampant grower and yields enormously; as many as seventeen large melons were taken from one vine. It is profitable, early and late. Plant from March 1st until July 15th.

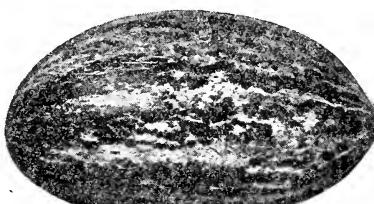
Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (lb. \$2.00). Prepaid.

Winter Pineapple.—(Read the above remarks). This is the first of casabas introduced into America. We have carefully maintained the purity of type so that it is now just as distinct as when introduced nearly forty years ago. This and the Golden Beauty are identical in all except color, which when mature is light green. The Winter Pineapple is more profitable as a late melon, therefore we recommend to growers near the Coast that it be planted during June. Our type of Winter Pineapple is round, selected for its good shipping qualities.

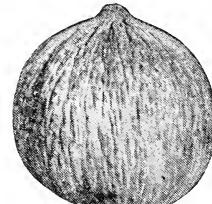
Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (lb. \$2.00). Prepaid.



Golden Beauty



A. & M. Santa Claus



Winter Pineapple

Golden Beauty.—(Read the above remarks). Although we introduced this casaba in 1905 when it at once became popular locally, it was not grown largely until last season. The Eastern trade prefers it to any other casaba. This is due to its pure golden color, which we have attained by careful selection and maintained by careful culture. It is similar to the Winter Pineapple in all but color. It is a popular all-season melon, and we advise planting it from March 1st to July 15th. It is now being shipped more extensively than any other.

Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (lb. \$2.00). Prepaid.

CASABAS—(Continued)

A. & M. Santa Claus.—The name is appropriate to the melon. It is a delightful present to send to your Eastern friends at Christmas. It is of delicious flavor, beautiful in its mottled gold and black coloring, and readily keeps until January. It sells well locally, but has not proven profitable to the shipper. We advise that it be grown more extensively for the local trade. The supply has not been equal to the demand for several years.

Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (lb. \$2.00). Prepaid.

White African.—Large, cream-colored, hard rind, green flesh, excellent flavor and good shipper. It is a great favorite in Southern France, where it is grown in every home garden and stored in cellars until eaten. When wanted it is placed at a sunny window for a few days. It then becomes ripe and of delicious flavor. Why not do so here? Try it.

Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c). Prepaid.

Summer Casaba.—This is a delicious melon for the home garden, but on account of its extraordinary size and poor keeping qualities, it is not a profitable melon to grow for the dealer, but just the thing to offer at the municipal market for immediate consumption.

Price—(Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25). Postpaid.

White's Favorite.—If you grow for market or a family garden plant White's Favorite, it is just about as delicious as the Improved Hybrid Casaba. It is more prolific, ripens on the vine like a muskmelon. The peddlers will buy it in preference to any other because of its excellent flavor. His customers will call for it as soon as it appears. We do not hesitate to say one acre planted to this melon will bring greater returns to the grower than any other melon, provided he will bring them to the market so that the peddler may buy. Plant every month from March first to July first. Price—(Pkt. 10c) (oz. 30c) ($\frac{1}{4}$ lb. \$1.00) (1 lb. \$3.00).

MUSKMELONS

Our Selected Melon Seed.—Owing to our extensive trade with large melon growers and associations, we exercise every precaution possible to secure the best type of melons. Having procured the best seed obtainable, we have them grown especially for us. Our seed fields proved the wisdom of this method, for they showed the highest per cent of perfect melons.

Culture.—Sow in hills six feet apart in rows eight feet apart. Drop about twenty seeds to the hill; cover one inch deep. To avoid the cucumber beetle cover the hills at the time of planting with cheese cloth about eighteen inches square placed over two wires bowed over the hills at right angles. When the plants are well advanced thin out, leaving two to the hill. Plant from March 1st until July 1st.

GREEN FLESHED VARIETIES

No. 3.—A. & M. Nutmeg.—This melon has now surpassed the Pineapple in popularity. Our largest growers are planting it exclusively. In appearance it is so similar to the Pineapple that many growers fail to notice the slight difference in shape and netting, but the greatest merit is its excellent flavor. Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) (5 lbs. \$5.50). Postpaid.

No. 8.—Pineapple.—This melon has long been the favorite because of its solidity, heavy netting, and fine appearance. The peddler likes it because it is a ready seller. Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) (5 lbs. \$5.50). Postpaid.

No. 9.—A. & M. Triumph.—Is similar to the Pineapple, but not so large. This is much in its favor, as gardeners are complaining that the Pineapple is too large. It excels the Pineapple, in the excellence of its flavor, and is two weeks earlier. Price—(Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) (5 lbs. \$6.75). Postpaid.

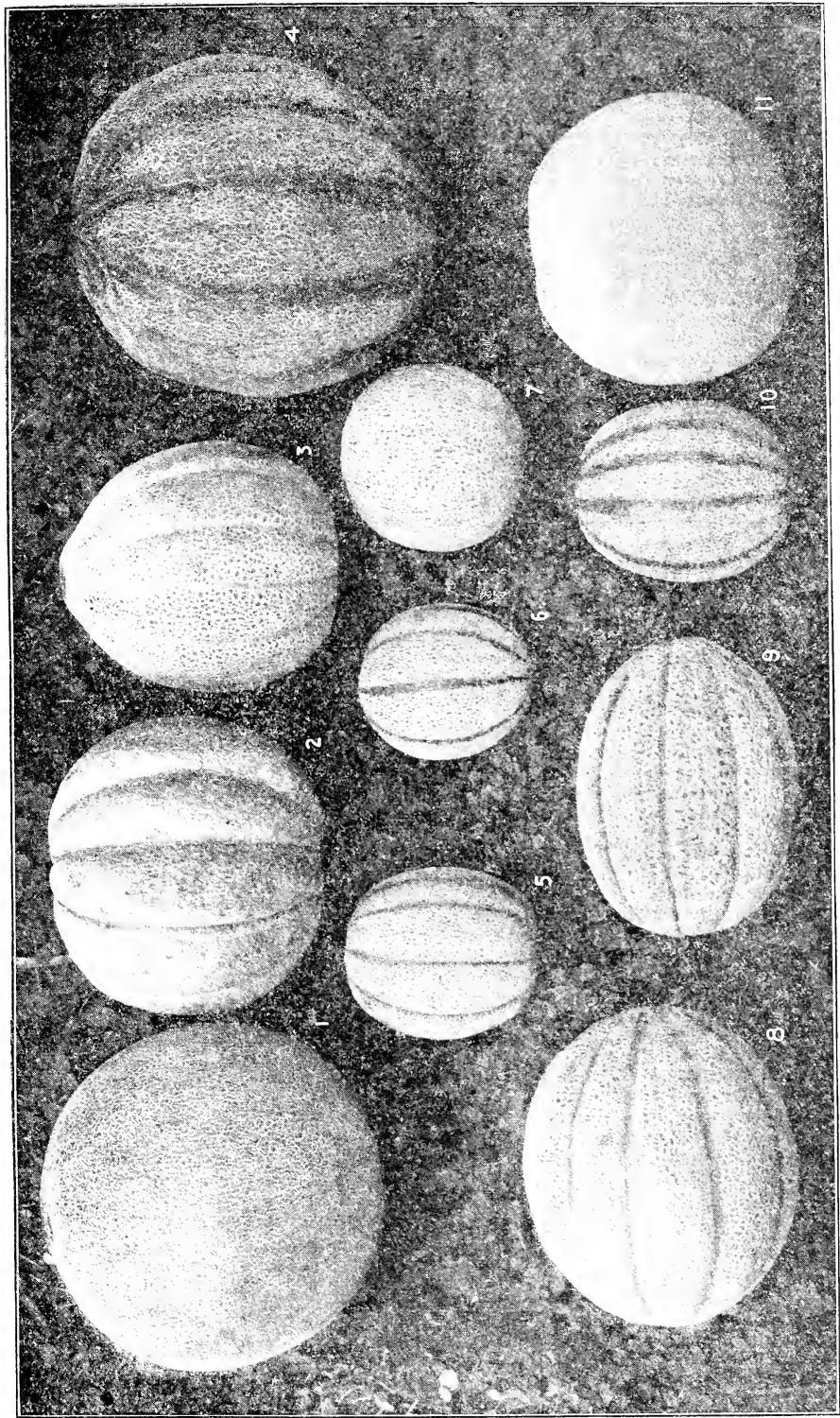
No. 6.—Rocky Ford.—The flesh is light green in color, except next to the seeds, where it inclines toward a yellow. The flavor is exceedingly fine. The skin is regularly ribbed and thickly netted. It is a firm, solid melon and will carry in perfect condition for a week or more after its removal from the vine. It is a heavy cropper, and in wide favor as a market melon. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00) (5 lbs. \$4.50). Postpaid.

Use one-fourth pound Wizard Fertilizer to each hill.

No. 5.—The Davis.—This muskmelon is very popular in the San Francisco market. This popularity is due to its size, which is just about right. It may be properly described by saying it is a large Netted Rock, and will weigh nearly twice as much and with improved flavor if such is possible. They grow uniformly, and are heavily netted, slightly but plainly ribbed.

Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) (5 lbs. \$6.75). Postpaid.

POPULAR MUSKMELONS OF TODAY



No. 1, Rule's Choice or Armenian Melon; No. 2, Tip Top; No. 3, A. & M. Nutmeg; No. 4, Los Angeles Market; No. 5, Davis; No. 6, Rocky Ford; No. 7, Netted Rock; No. 8, Gauntier Pineapple; No. 9, A. & M. Triumph; No. 10, Burrell's Gem; No. 11, Yellow Flesh Columbus.

MUSK MELONS—(Continued)

No. 4.—Los Angeles Market—This is the largest of all the Muskmelon family except California Giant, and we positively state that none will excel it in flavor. Gardeners object to its large size, but good profit will come to the grower who will plant it. It yields an enormous crop and all melons are very large and beautiful. Price (per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) (5 lbs. \$5.50). Postpaid.

Large Hackensack.—Sometimes called Turk's Cap. A large, round melon, flattened at the ends and well ribbed. The skin is deeply netted. The flesh is green, of delicious flavor. It is a strong grower, and is very productive. An old standard melon, in favor with market gardeners. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00) (5 lbs. \$4.50). Postpaid.

Montreal Market.—Large size and delicious flavor. One of the best market sorts. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) (5 lbs. \$5.50). Postpaid.

No. 7.—The A. & M. Netted Rock.—Has established for itself such a reputation with large growers and shippers that it is no longer necessary to refer to it as something new, but to give it prominence as one of our specialties that has created a demand for itself in all the large melon growing sections in the Southwest and Old Mexico.

Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) (5 lbs. \$6.75). Postpaid.

California Giant.—The largest of all muskmelons, frequently weighing thirty pounds. It has green flesh of an excellent flavor. It finds a ready market. It is particularly good for spicing. Price (per pkt. 10c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50). Postpaid.

No. 11.—The Columbus.—A green-fleshed melon. Its beautiful buff skin is covered with a very thick whitish netting; almost entirely free from ribs. The flesh is solid and thick, even at the blossom end, leaving only a small seed cavity. Can be safely shipped long distances. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25). Postpaid.

YELLOW FLESHED VARIETIES

Rule's Choice and Yellow Fleshed Columbus.—See page 24.

THE NOW POPULAR PERSIAN MELON

This delicious melon is in a class by itself, neither casaba nor muskmelon. The picture describes the outward appearance. It has yellow flesh, very thick, having a flavor quite distinct from any other melon. Although last season was only the second since its introduction, it commanded a higher price and was in greater demand than any other melon offered at the market.

The peddlers and buyers for hotels would seek it eagerly each morning. It is a good keeper, and should be marketed under-ripe. The consumer should be instructed to hold for several days and eat when the rind tends to turn yellow.

Price—(Pkt. 10c) (oz. 25c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.00). Prepaid.

No. 10.—Our Improved Burrell's Gem.—Has established itself as a standard melon. It is one of the biggest yielders. The shipper calls for it because it is solid and carries well in transit. The consumer wants it because of its excellent flavor. The growers all want our seed because we have the best strain. Many growers who bought of us last year have engaged their seed for next season.

Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) (5 lbs. \$6.75). Postpaid.

No. 2.—Tip Top (Yellow Flesh).—This melon is very popular at Long Beach, almost to the exclusion of any other variety. This is a fine, round melon of such attractive appearance as to always sell quickly in the markets. It is sweet, juicy and delicious. The flesh is firm, but not hard, and is edible almost to the rind. The melon is of medium to large size and is one of the best yellow fleshed sorts. Price—(Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) (5 lbs. \$6.75). Postpaid.

Improved Osage.—This has for many years been one of the leading varieties in the East because of its earliness and excellent flavor. It is of medium size, salmon flesh, with green rind, similar to the well-known Burrell's Gem. Once a customer for Osage, always a customer. Price—(Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) (5 lbs. \$5.50). Postpaid.

Paul Rose.—A small yellow fleshed melon of excellent flavor, good for home market, but not suited to ship. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25) (5 lbs. \$5.50). Postpaid.

Emerald Gem.—A very small delicious salmon-fleshed muskmelon. It would make a market gardener independent of all other growers if he would establish a trade with first-class hotels. The Emerald Gem would hold the trade. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) (5 lbs. \$6.75). Postpaid.

Pomegranate, or Peach-Melon.—For Mangoes. Pkt. 5c.

The Vineless Muskmelon.—This new variety is particularly suited for hot-house growing; the vines scarcely more than eighteen inches long; bears profusely of small muskmelons about the size of a large apple, heavily netted and heavily ribbed; green flesh of delicious flavor. Just the thing for forcing and ought to prove a money-maker for the first early melons. Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c).

WATERMELONS



Chilian

Growers wanting ten pounds or upward write for special price.

Klondike.—See page 25. **Angeleno.**—See page 25.

The Chilian.—Never before did a melon so completely monopolize an entire market for so long a time as the Chilian. This is due to our carefully selecting the best seed stock each year. It is a good shipper, but the grower frequently errs in shipping before the melon is ripe, with the result that the melon is not sweet and the consumers condemn it. No melon is superior in flavor to a good Chilian.

Our watermelon seed was grown for us under our personal supervision. It is pure.

White Seeded Chilian.—Is the largest, most prolific and best shipping melon of all the Chilian varieties. The flavor is equal to the best, but it is not as early as Black Seeded type. Our strain of White Seeded Chilian is the largest and purest obtainable. Price—(Per pkt. 5) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00) (5 lbs. \$4.75). Postpaid.

Rattlesnake.—Has long been a popular melon with shippers. It is a long melon, having a white rind, with dark green stripes. Flesh of excellent flavor. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00). Postpaid.

Yellow-fleshed Ice Cream Watermelon.—This melon is well known in the Los Angeles market. It grows to a very large size, is long in shape and the rind an even dark green. In quality it is simply delicious, sugary and of a rich flavor peculiar to itself. Price—(Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50) (5 lbs. \$6.75). Postpaid.

Kleckley's Sweet.—This is a good shipping melon. It is of medium size, a very green rind, with deep red flesh of delicious flavor. Our seed positively cannot be excelled. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (1 lb. \$1.00) (5 lbs. \$4.75). Postpaid.

When in doubt what variety to plant, write us.

Red Seeded Chilian.—This is the sweetest of all the Chilian types and should be the best seller on the Los Angeles market. It is too crisp to ship in car lots, as the White and Black Seeded types, but is always satisfactory to the grower because a field will produce melons throughout the season, whereas the vines of the Black Seeded Chilian give out before the season is half over.

Price—(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00) (5 lbs. \$4.75). Prepaid.

Black Seeded Chilian

Introduced by us in 1910. This melon resembles in appearance the White Seeded Chilian, but will average smaller. It owes its popularity to its earliness, good shipping qualities, excellence of its flavor, its black seed and red flesh so much desired by hotels and all places where cut melons are served. The peddler prefers it because of its medium size and because it is always satisfactory to the customer.

Price—(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00) (5 lbs. \$4.75). Prepaid.

A new way to plant large fields to muskmelons and watermelons. Easy, rapid and right. Use our Segment Corn Planter.

Culture.—Plant from March to July in light, sandy loam. Prepare the soil well by deep plowing and thorough harrowing and ridge up slightly. Plant in hills ten feet apart, ten to twenty seeds in a hill, to enable the sprouts to force their way to the surface. Do not plant more than two inches deep. After the plants have become hardened, thin out to three in a hill.

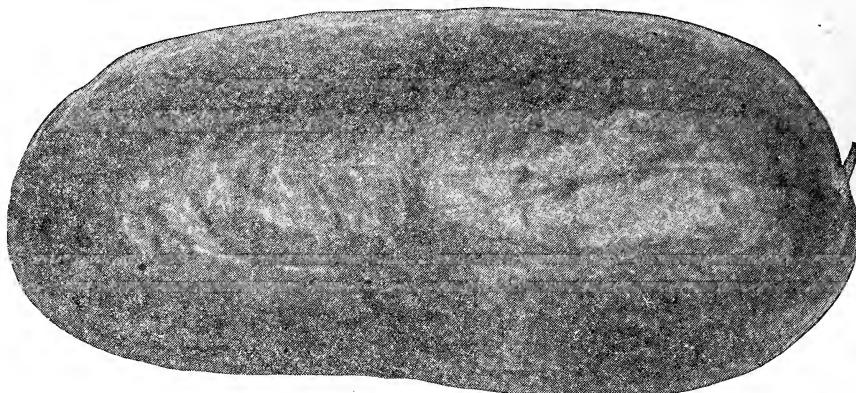
A word to all who grow to ship: Owing to the extensive business we have with melon growers throughout the Southwest it has become necessary that we grow all our own melon seed in order to have the best. Our seed fields appeared to us to be perfect, showing the finest type of large, perfect melons. Our Klondike, Angeleno, Kleckley Sweet, Florida Favorite, Rattlesnake, Santiago, Chilian and Tom Watson cannot be excelled.



Segment Corn Planter.
All large melon growers are now using the Segment Corn Planter—it does the work better. Price \$1.50.

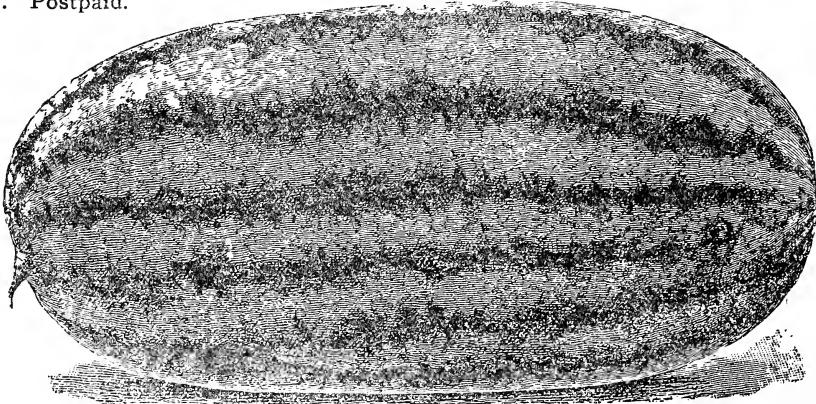
WATERMELONS (Continued)

Santiago—This variety has many of the good qualities of the well known Chilean. It is a large, long, heavy melon; rind dark green with stripes of black. The flesh is deepest red and solid throughout, the edible portion extending to within half an inch of the skin. The rind is very hard and it is a good shipper. Price—(Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00.) Postpaid.



Tom Watson, Weight 80 lbs.

The Tom Watson has for several seasons been the most popular melon in the South. Its shape is similar to the Kleckley Sweet, but the color is a lighter green. Its great merit is in its earliness, good flavor, thin rind, and good keeping qualities, making it one of the best of shippers. It is popular in the San Joaquin Valley. Our seed stock was selected from perfect melons, and our field showed a perfectly pure strain. Price—(Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.25) (5 lbs. \$4.75). Postpaid.



Florida Favorite

Florida Favorite.—This melon is very popular with shippers, because of its extreme earliness, and all round good qualities as a good shipper. In appearance it is similar to the Rattlesnake, the rind being considerably darker. Price—(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00) (5 lbs. \$4.75). Postpaid.

Citron, Large Green Striped.—Weighs from thirty to sixty pounds. Is better than pumpkin for stock. Allowed to lay in the field or piled in the barnyard will not be damaged by frost nor decay until the following summer. Price—(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 20c) (1 lb. 60c). Postpaid.

Citron, Red Seed.—Small dark rind round melon, used for jam and preserving. It has an excellent flavor. Price—(Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

MARTYNIA

Martynia, or "Unicorn Plant".—The Martynia, or Unicorn Plant, is quite ornamental in growth, and bears large pyramidal spikes of Gloxinia-like flowers followed by hairy seed-pods of a peculiar shape. These pods are gathered while young and tender, and pickled. (Pkt. 10c) (oz. 30c).

MUSTARD



Chinese Green Mustard

Black or Brown.—(Per
pkt. 5c) (oz. 10c) (lb. 40c).
Postpaid.

White.—Better for salad
or culinary purposes. (Pkt.
5c) (oz. 10c) (lb. 40c). Post-
paid.

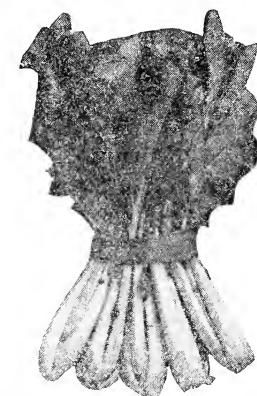
Southern Giant Curled.—
The true curled-leaf variety
so popular in the South for
planting in the fall. (Per
pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c)
(lb. 75c). Postpaid.

Ostrich Plume Mustard is
delicious as well as ornamental;
the leaves resemble ostrich
plumes, hence the
name. (Pkt. 5c) (oz. 10c)
(lb. 90c). Postpaid.

Chinese White Mustard.—
This is a delicious vegetable
and flavors strongly of Brussels
Sprouts, being less pun-
gent than the American varieties.

It is greatly relished by the Orientals, and can
be seen all the year round at vegetable stands kept by the Japanese and Chinese.
Price—(Per pkt. 10c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50). Postpaid.

China Green Mustard.—This is an Oriental vegetable, and like the White Mustard, is grown all the year round, but like our American Spinach, thrives best in the winter season. Great quantities of it is dried and used for medicinal pur-
posts. Price—(Pkt. 10c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.50). Postpaid.

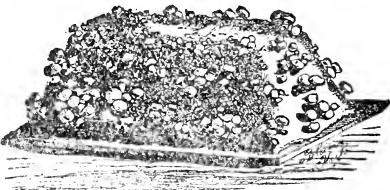


Chinese White Mustard

MUSHROOMS

One of the most profitable crops for the outlay that can be grown. The market is sure, because the supply never equals the demand. Mushrooms can be grown in any dark room or cellar where the temperature can be kept at 50 to 75 degrees. The main conditions in mushroom growing are proper and uniform temperature and very rich soil. One pound of spawn is sufficient for a bed 2x8 feet. We have the very best spawn obtainable. If interested, write for circular.

Pure Culture Spawn—Brandywine—Put up in bricks. Per brick, 25c; by mail 40c.



Mushrooms

Culture.—No crop is so liable to variations by cultivation and soil as the onion. Having rich soil with too much irrigation will produce thick-necked scallions, while the same soil well drained would produce the finest onions. A sandy loam well fertilized is best.

Either drill the seed thinly in rows fourteen inches apart, or sow the seed in seed beds, and when the plant is as thick as a straw, transplant on ridges; set two rows on each ridge and four inches apart in the row. See page 29.

Irrigate in the furrow between the ridges to avoid flooding the onion, which causes the onion to perish readily, rendering it unfit to ship or to keep.

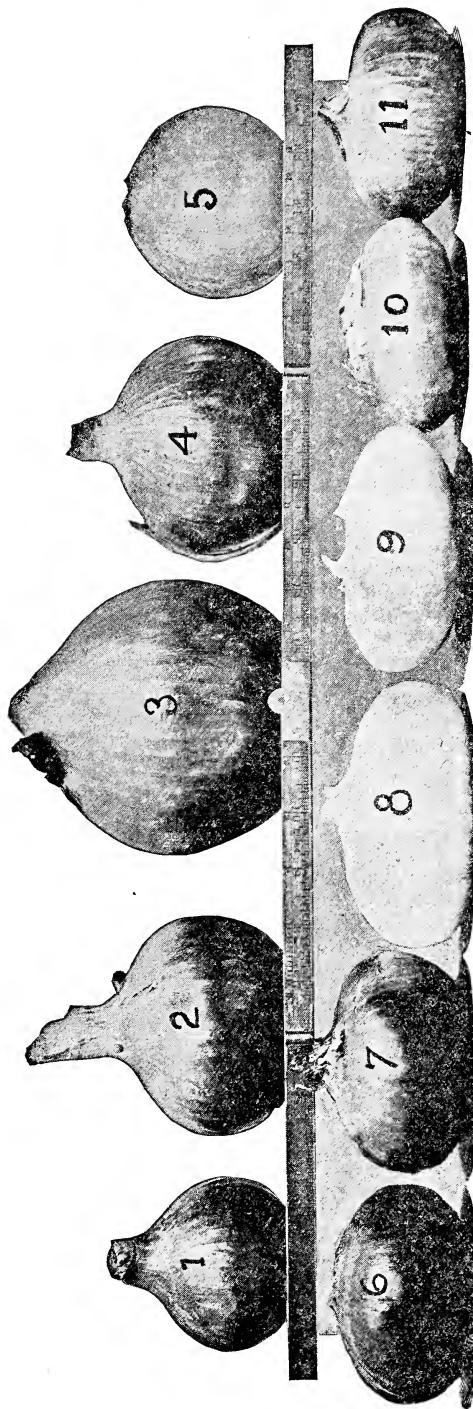
To succeed in growing onions it is highly important to make a proper selection of seed suitable to the time of planting. West of the Coast Range plant Early Queen onion in August. It will then attain marketable size in March and April. If, however, the weather during February and March proves to be cold and rainy, a large percentage will shoot to seed. We advise that you pinch off the seed stem close to the onion. It will heal with no damage to the onion. East of the Coast Range, where the temperature seldom goes below 25 degrees, plant the Crystal Wax or Bermuda onion in September. We advise planting all other varieties from October until April, selected according to the market in which they are to be sold, and the facilities for irrigating.

The consuming public prefers a white onion. The retail merchant wants a yellow onion because the white are too perishable. The shipper will handle the yellow, but prefers the brown because it is the best keeper.

ONIONS

Ask for our GARDEN MANUAL with your first order—it is FREE.

California now easily leads the world growing large onions, but some varieties are better suited to certain localities and soils than others. We have carefully studied these conditions and invite those who wish to grow onions and are yet unfamiliar with the conditions, to write us before selecting their seed.



- | | |
|---------------------------|-----------------------|
| 1. Australian Brown. | 7. Red Weathersfield. |
| 2. Ohio Yellow Globe. | 8. New Queen. |
| 3. Prizetaker. | 9. Crystal Wax. |
| 4. Yellow Globe Danver. | 10. White Portugal. |
| 5. Southport White Globe. | 11. White Bermuda. |
| 6. Yellow Flat Danver. | |

We claim our onion seed to be of the highest type as to germination and purity of type. When you wish to plant onions consult us as to when, how and what variety to plant.

ONIONS (Continued)

Southport White Globe.—It is silvery white in color, globe shaped in form, flesh of delicious flavor and a fine keeper. The very best variety to grow for bunch onions. (Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.25). Postpaid.

White Portugal, or Silver Skin.—Under good cultivation the average diameter is from four to six inches. The thick skin is a clear silvery white, flesh snow-white, sweet and tender. (Per pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 65c) (lb. \$2.00). Postpaid.

New Queen.—Very similar to the Crystal Wax in appearance, but better adapted to the coast climate. For years it has been our best early onion. It attains mature size in March, at the time Bermuda onions arrive on the local market. The Queen onion may be sold locally at any time it is large enough, although it may be immature for shipping, giving you the advantage of about three weeks in earliness. (Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.25).

Crystal Wax.—This best and earliest of all white onions found a congenial climate in Southern California, and it now excels all our other white varieties for the early market. The Crystal Wax is now largely grown in the San Joaquin and Imperial Valleys, where it attains perfection. Plant the seed any time, September to February 1st, according to the instructions above. Price—(Pkt. 10c) (oz. 40c) ($\frac{1}{4}$ lb. \$1.25) (lb. \$4.00). Postpaid.

Southport Red Globe.—This beautiful onion is rapidly coming into favor here. It keeps better than other red varieties. Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 60c) (lb. \$1.75). Postpaid.

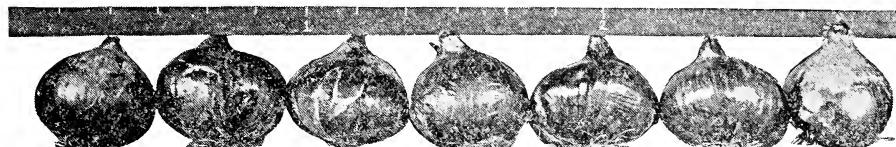
Australian Brown.—Quick to mature; a good keeper; solid and heavy; an excellent onion for shipping. The skin is a light brown. Its solidity gives it great weight and a sack weighs several pounds heavier than a sack of other varieties. The onions are thin-necked and ripen very early in all soils. As the plant makes a very quick growth it matures the bulbs before the hot, dry summer weather sets in, and this in connection with its exceptional keeping qualities makes it a most profitable variety. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25). Postpaid.

Prizetaker, the handsomest, largest Yellow Globe Onion.—A good keeper, of finest flavor, handsome shape and enormous size, many single onions having been raised to weigh five pounds or over from seed the first year. The Prizetaker grows always to a perfect globe shape with a bright straw-colored skin. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 45c) (lb. \$1.50). Postpaid.

Yellow Flat Danver.—Similar to the Yellow Globe in color and quality, but somewhat flattened in shape, and is earlier. It is a fine large onion with a very small stem. Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 45c) (lb. \$1.25).

Yellow Globe Danvers.—This onion is the standard winter sort in many markets. The shape is almost globe form and the bulbs are quite large with thin necks. The skin is yellow, while the flesh is pure white, solid and of good quality. Its earliness makes it valuable for market. The crop is very uniform and ripens at one time. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 45c) (lb. \$1.25). Postpaid.

Large Red Wetherfield Onion.—For general purposes, the country over; no red variety is more largely grown. The largest, most uniform, heaviest yielder and a good keeper. This is a standard red variety. We recommend it as a general cropper and a variety that will do well anywhere that large onions can be grown. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 45c) (lb. \$1.25). Postpaid.

SEVEN GIBRALTARS, ONE YARD

Giant Gibraltar.—This is probably the largest of all onions (not excepting the Prizetaker.) Skin of light straw color, flesh white, tender and mild. These Onions are excellent for home use at any time while in the growing state. It is a good shipper. Where a large yield is the main desire, plant the Giant Gibraltar. It will yield fifty per cent more per acre than any other variety except the Prizetaker. Price—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 45c) (lb. \$1.25). Postpaid.

White Australian.—Medium to large size, nearly globe-shaped. A white onion with all the good keeping qualities of the Australian Brown. Just the thing for the shippers. The market prefers a white onion above all others, and this one should readily supersede, because it will remain firm on the market, and can be shipped to Eastern markets without loss from decay.

Price—(Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50).

Ask for Our Garden Manual. It is Free With Your First Order.

ONIONS (Continued)

Yellow Bermuda Onion.—This is the standard variety for shipping. While it is known as the "White Bermuda," this name is misleading, as it is really a light straw color or pale yellow. We make this explanation, as many who grow it for the first time expect to find a pure white onion. (Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50). Postpaid.

Red Bermuda Onion.—It is identical in size, shape and mildness with our White Bermuda. The color is a pale waxy red, and it is just the right variety in all sections where a red onion is preferred. (Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50). Postpaid.

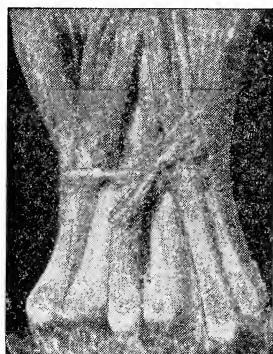
Extra Early Red Flat.—This is the early onion grown in the Sacramento Valley for the San Francisco market, where it is in great demand. (Per pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 50c) (lb. \$1.75). Postpaid.

Bunching Onion.—Many think any white onion will do for a bunching onion, but this is not true. Our growers for fancy trade have learned that we have the best strain of seed for this purpose, and our sales amount to thousands of pounds each year. The picture shows a sample of what our seeds produce. They are just the right shape. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c) (1 lb. \$1.50). Postpaid.

Garlic Sets.—Garlic sets or bulbs are planted from September to February in rows 12 inches apart, placing the sets four inches apart in the rows, one inch deep, or in the same manner as for Multiplier Onions. Garlic is used for flavoring purposes. Bulbs—(Per lb. 20c) (by mail 30c) (100 lbs. market price).

Chives.—This species of onion is extensively used for flavoring. A small spot in the garden planted to Chives will supply a family the year round. (Per pkt. 10c) (plants, 1 bunch, 10c). Postpaid.

Multipliers or Shallots are always in stock from September 1st to January 1st. Price—(Per $\frac{1}{2}$ lb. 25c) (lb. 40c prepaid).



Bunch Onions

ONION SETS

Australian Brown, Yellow Danver, White Pearl and Silverskin. (Per lb. 30c) Prepaid.

The earliest onions are grown from sets planted in September. This brings them in the market in February and March, when prices are highest. About 250 pounds of sets will plant one acre, or four pounds of seeds is required per acre. Write for quantity prices on sets and seed, as the prices fluctuate.

OKRA GUMBO

White Velvet.—This well-known variety is the favorite with the market gardener and with the consumer. The pickle factory will have no other. (Per pkt. 5c) (oz. 10c) (1 lb. 60c.) Postpaid.

Mammoth Long Podded.—Very productive, and is a good variety for the family garden. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 60c.). Postpaid.

PARSLEY

Culture.—Same as lettuce. (See page 29).

Champion Moss Curled.—Extra dark. Leaves crimped and curled, giving a most beautiful decorative appearance. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25). Postpaid.

Emerald or Dwarf Extra Curled.—Leaves tender, beautifully crimped; handsome, bright green color; very ornamental. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25). Postpaid.

Extra Double Curled.—An old curled variety for garnishing. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25). Postpaid.

Hamburg Turnip Rooted.—Fleshy vegetable roots, for soups, etc. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. \$1.00). Postpaid.

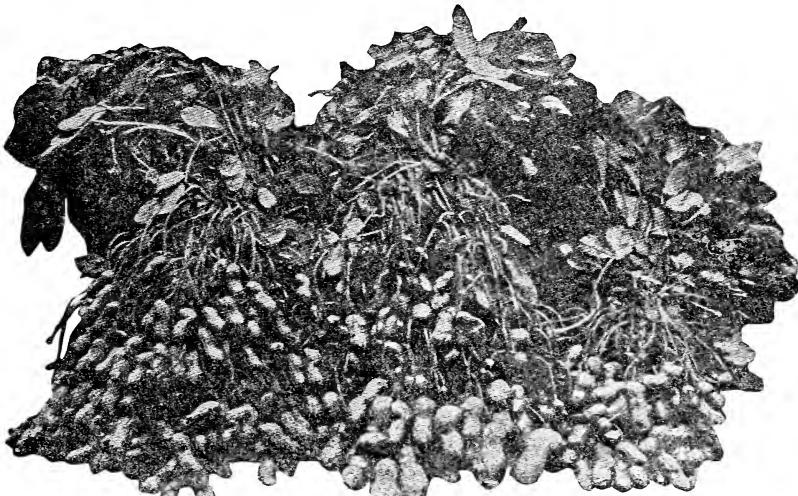
This catalog throughout aims to give you the information you want, and you will generally find it where it ought to be. If you do not find the information you want, write us stating what you want to know.



Champion Moss Curled

PEANUTS

Write for Special Circular



Georgia Improved

Jumbo

Tennessee Red

Georgia Improved Peanut.—This variety is much superior to the ordinary Peanut, yielding fewer imperfect pods and combining earliness, productiveness and size; yields on ordinary land about 40 sacks to the acre. (Per lb. 25c, prepaid) (per 100 lbs., market price).

Tennessee Red.—Is an excellent variety, bearing three or four kernels to the pod. The kernels are of medium size and of good flavor. It is the favorite variety with the confectioner. Price—(Per lb., 30c prepaid) (100 lbs. \$12.00).

The Jumbo is by far the largest of all peanuts. It is a curiosity and commands a fancy price. On account of its vigorous vines and enormous crop of large tubers it is an excellent crop to grow for hogs, or to plow under for enriching the soil. (Per lb. 35c) (10 lbs. \$2.50). Prepaid.

PARSNIP

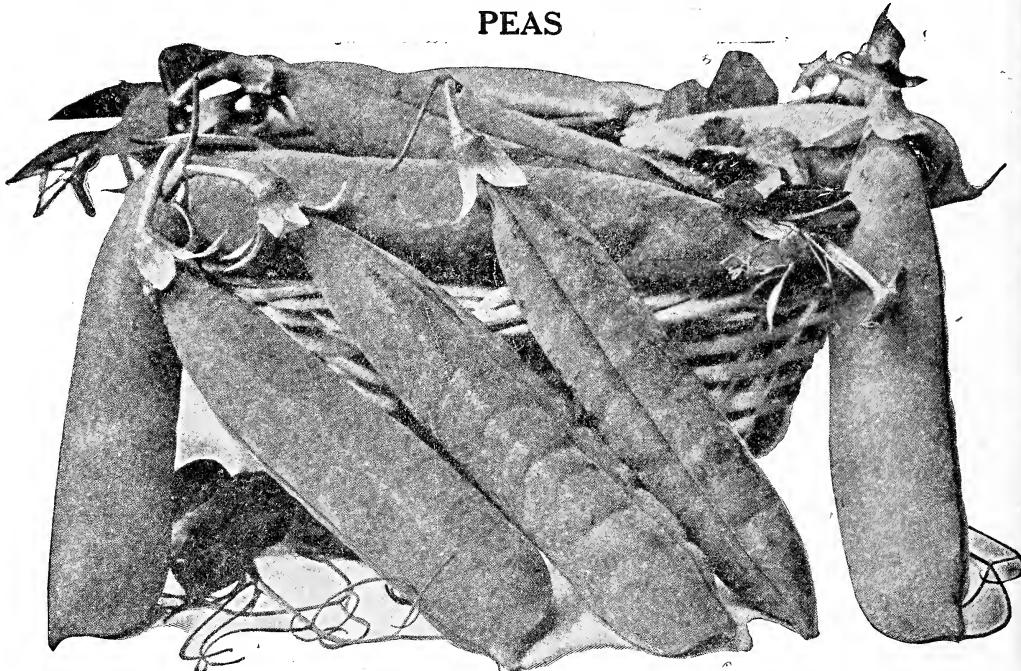
Our New French Parsnip.—Just right for the market gardener. The picture shows the actual size at time of marketing. It grows slightly larger, but it attains this size in ninety days, which is a full month earlier than other varieties. It is crisp and succulent. It will at once supersede all other varieties because of its all-round desirability. Price—(Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

Devonshire.—This Parsnip was recommended to us by our European growers. Today it is the most popular Parsnip with our market gardeners. It is scarcely more than half as long as the hollow Crown, but it is often three inches in diameter. Tender, and has an excellent flavor. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

Hollow Crown.—Has long been a favorite in the family garden on account of its excellent table qualities. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

New French Parsnip
Actual Size

PEAS



The Pride of Cahuenga

The popularity of this pea has made such strides that it is hard for us to keep up with the growing demand. Owing to its tendency to grow numerous branches, and to grow two pods on every stem, it is enormously productive. It grows to a height of eighteen inches and matures about as early as the Yorkshire. When you once grow the Pride of Cahuenga you want no other. The peas are sweeter. It is undoubtedly the best pea ever put before the public.

Price—(Pkt. 5c) (1 lb., 30c prepaid) (10 lbs. \$1.50) (100 lbs. \$12.00).

American Wonder.—The earliest of all wrinkled peas. Of dwarf habit, growing from nine to eleven inches high, and producing a profusion of good-sized and well-filled pods of the finest flavor. (Per pkt. 5c) (1 lb., 30c prepaid) (10 lbs. \$1.50). Write for quantity prices.

Nott's Excelsior.—Although a few days later than the American Wonder, the pods will average fully one-third larger, containing 6 to 8 large peas, so closely packed together that they become flattened. (Per pkt. 5c) (1 lb., 30c prepaid) (10 lbs. \$1.50). Write for quantity price.

Yorkshire Hero.—A very popular market pea in this section. Abundant cropper and excellent in quality. Height 2½ feet. (Per pkt. 5c) (1 lb. 35c, prepaid).

Stratagem.—A favorite in the San Francisco market. The pods are of a dark green color and remain firm several days after picking. A very strong grower; very prolific, pods of good size and well filled. Vines stand upright about 2½ feet; an excellent variety. (Pkt. 5c) (1 lb. 30c., prepaid) (10 lbs. \$1.30.) Write for quantity price.

Tall Telephone.—Vines vigorous, growing about 4 feet high, with large, coarse, light-colored leaves and producing an abundance of very large pods filled with immense peas which are tender, sweet and of excellent flavor. (Per pkt. 5c) (1 lb. 30c, prepaid) (10 lbs. \$1.50). Write for quantity price.

Dwarf Telephone.—Or Carter's Daisy has become the leading pea with market gardeners whose trade appreciate fine appearance and high quality. It produces an abundance of very large pods filled with immense peas which are tender, sweet and of fine flavor. (Per pkt. 5c) (1 lb. 30c, prepaid) (10 lbs. \$1.50). Write for quantity price.

Premium Gem.—A dwarf variety very prolific and sweet. **Price**—(Per pkt. 5c) (1 lb. 30c, prepaid) (10 lbs. \$1.50). Write for quantity price.

Gradus.—The largest of all extra early varieties; medium tall; quality superior to all other varieties. **Price**—(Per pkt. 5c) (1 lb. 30c, prepaid) (10 lbs. \$1.50). Write for quantity price.

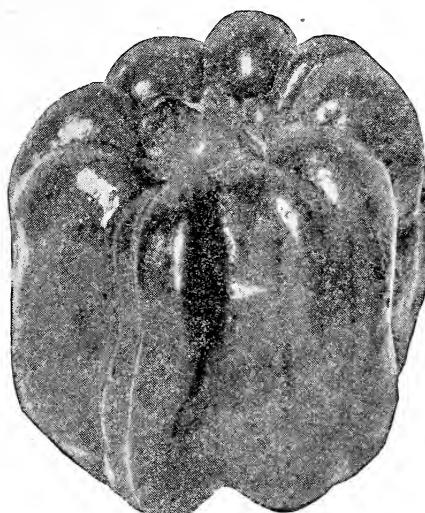
Dwarf Gray or Sugar.—(Edible pods.) Of extraordinary yielding qualities, and unsurpassed as an edible podded variety. (Per pkt. 5c) (1 lb. 35c prepaid).

PEPPERS

Get our Garden Manual free with first order.

Culture.—Seed may be sown in seed beds all the year round, according to location. When the weather is favorable, transplant in the open ground in warm, mellow soil, in rows 30 inches apart and 18 inches apart in the rows. One ounce of seed will produce 1000 plants. Peppers require a rich, sandy loam with frequent irrigation.

Anaheim Chili and Pimiento.—See page 26.



Chinese Giant Pepper

and less pungent than most other sorts, and one of the earliest; very prolific. (Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50).

Tobasco.—The plants develop into large bushes, bearing profusely the little bright peppers in sprays. A mature pepper measures about one inch in length. These peppers are extremely pungent. (Per pkt. 10c) (oz. 25c).

Dwarf Chili.—Same as Tobasco, but twice as large. (Per pkt. 10c) (oz. 25c).

Floral Gem.—A small hot pepper for pickling, or to use as a pot herb. (Per pkt. 5c) (oz. 25c).

Creole, or Bird's Eye.—A distinct variety, fruit very small, about $\frac{3}{4}$ of an inch long and of very hot flavor. (Per pkt. 5c) (oz. 25c).

Chili Piquin.—Fruit very small, round, and exceedingly pungent. Used for seasoning and pepper sauce. (Price pkt. 5c) (oz. 25c).

This book contains much valuable information; do not destroy it, you will need it again.

What, When and How to Plant; 340 questions answered, on inside of back cover page.

If you desire particular information concerning any subject in this book do not hesitate to ask us. We shall be pleased to reply.

If you are living in a thermal zone, have a winter garden, not only for your own enjoyment, but for profit. Plant Chinese Giant pepper, Cahuenga peas, Canadian Wonder beans, Monstrous Bush limas, A. & M. First Early tomatoes, Egg plant, and New York lettuce.

Red Cluster.—A very short heavy-set bush, almost a solid cluster of small peppers of 1 inch in length. (Per pkt. 10c) (oz. 30c).

Cayenne.—A long, slim pepper, rather pointed, and when ripe a bright red color. Extremely pungent. (Per pkt. 5c) (oz. 25c).

A. & M. Perfect Ruby King.—Ordinarily they grow from 4 to 6 inches long by 3 to 4 inches thick. Plant is of sturdy, bushy habit, and each one produces handsome fruit. This pepper is popular because of its solid, thick meat and mild flavor. Price—(Pkt. 10c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00) (lb. \$3.00).

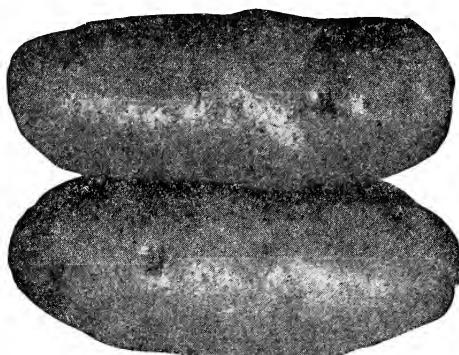
Chinese Giant.—A very large Pepper of the Bull Nose type, often growing to five inches in diameter. This is the variety grown so extensively in frostless sections for the winter trade, when the grower gets as much as 20c per lb. for the green pepper. One grower claims that his returns from five acres was \$4500. Price—(Per pkt. 10c) (oz. 55c) ($\frac{1}{4}$ lb. \$1.85) (lb. \$5.50).

Big Bell, or Bull Nose.—Very large sort of inverted bell shape. Flesh thick, hard



1 Tobasco
2 Floral Gem
3 Small Chili
5 Chili Piquin
6 Cayenne

POTATOES



American Wonder

toes, at the following prices.

We will continue to grow and select seed potatoes from year to year in the future and we expect our seed stock will be so much improved that it will double the yield of potatoes grown therefrom.

In addition to the above, we can furnish any quantity of seed of the same varieties grown from selected seed, but field run raised with ordinary care at market prices.

BLISS'S TRIUMPH

This is a round red potato, is not a big yielder, but is the earliest potato we know of. It gets entirely ripe in nine weeks. The potatoes produced are always good size and are of exceptionally good quality. They have proven the most satisfactory for the desert country, where moisture is scarce and a quick crop is necessary. They make very small tops and the potatoes form very close together, hence they can be planted a foot apart in the rows and have room enough.

Selected Seed (\$3.00 cwt.) (\$58.00 per ton, F. O. B. Los Angeles).

Seed not selected fluctuates with the market, write or wire for prices.

AMERICAN WONDER

This is the most popular early variety in the Southwest. It is a long white potato resembling the Burbank. It gets entirely ripe in three months. On good land they make an enormous yield of fine potatoes of excellent quality. They set from fifteen to twenty-five potatoes to the hill, and it is not advisable to plant them on very poor land, as you will have too many small potatoes.

Selected Seed, \$3.00 cwt. (\$58.00 per ton, F. O. B. Los Angeles.)

Seed not selected fluctuates with the market, write or wire for prices.

EARLY RED ROSE

This is a long red potato about ten days later than the American Wonder. It is very desirable for selling in lug boxes on the early market and is better for poor land than the American Wonder.

Selected Seed, \$3.00 cwt. (\$58.00 per ton, F. O. B. Los Angeles.)

Seed not selected fluctuates with the market, write or wire for prices.

EARLY OHIO

This is a very desirable variety for the family garden. Its quality is extra good and matures in ten weeks.

Selected Seed, \$3.00 cwt. (\$58.00 per ton, F. O. B. Los Angeles.)

Seed not selected fluctuates with the market, write or wire for prices.

EARLY WHITE ROSE

This is the potato that is most popular for a general cargo in Southern California, owing to its good yield of nice, smooth potatoes. It will grow on poorer land than the American Wonder and is two weeks later. It is one of very best for the table.

Selected Seed, \$3.00 cwt. (\$58.00 per ton, F. O. B., Los Angeles.)

Seed not selected fluctuates with the market, write or wire for prices.

BURBANK

This is the best late variety, fully a month later than the White Rose. It sets heavily and yields a big crop on good land. We do not recommend them on poor land as they make too many small potatoes.

Selected Seed, \$3.00 cwt. (\$58.00 per ton, F. O. B. Los Angeles.)

Seed not selected fluctuates with the market, write or wire for prices.

To obtain the best results, to get the biggest yield and the most uniform potatoes the seed should be carefully selected for each planting.

Owing to the fact that seed potatoes will not keep through the summer months in this climate, it is necessary for the farmers to purchase most of their seed from stock shipped in from other sections of the country. In most cases the potatoes, shipped here in the past, were commercial potatoes and not selected seed stock, hence did not give the best results.

For some time we have recognized the necessity of better seed potatoes for the farmers and we are now prepared to furnish a few carloads of each of the following varieties selected for seed potatoes.

Potato Scab.—Dip in solution one pint of Formaldehyde to thirty gallons water for fifteen minutes. **Price of Formaldehyde**, per pint 50c.

Potato Inspection—All potatoes intended for seed purposes must be inspected by the County Horticultural authorities before they may be received and again before they may be shipped out. This is a great protection to the grower.

SWEET POTATOES

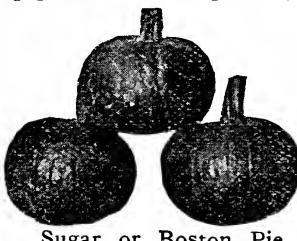
The handling of Sweet Potatoes for seed purposes has been unsatisfactory to our customers as well as to ourselves, on account of the perishable nature of the small Sweet Potato. We have decided to list only plants of which we will have a large supply, at lowest market price.

However, if you wish us to secure sweet potatoes for seed purposes we will do so at your risk; check or cash much always accompany the order, either for Sweet Potatoes or plants, no matter what your financial standing is.

We will have plants ready about March 1st of the following varieties: Yellow Jersey, Yellow Nansemum. **Price**—(75c per 100, prepaid) (\$4.00 per 1000).

PUMPKINS

Japanese Pie Pumpkin—(Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.



Sugar or Boston Pie

California Mammoth.—This is the large pumpkin so well known locally. As many as 20 tons have been taken from one acre. It not infrequently attains a weight of 200 pounds. **(Per pkt. 5c)** (oz. 10c) (lb. 50c, prepaid).

Sugar or Boston Pie.—A small handsome variety, and very popular. The skin is a deep orange yellow; flesh fine grained and sweet in taste. Famous in Boston as a pie pumpkin. It sells better on our local market than any other variety, except the Jack o'Lantern at Hallowe'en time. **(Per pkt. 5c)** (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.

Sandwich Island.—The most popular pumpkin in Ventura County. It is as hardy as a citron. A good one to plant where water is scarce. **(Per pkt. 5c)** (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.

Estampes.—We have the purest stock seed from which to grow this pumpkin. It is the heaviest pumpkin for its size that we know of; 100 pounds is not an unusual size for them to attain. It is the canner's favorite because of its thick, deep red flesh and the fine sweet flavor. It is without exception the best for dairy stock, and only the scarcity of the seed has prevented it from being more widely known. **(Per pkt. 5c)** (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 80c). Postpaid.

Kentucky Field or Large Cheese.—This variety is locally called Sweet Pumpkin, and is grown more than any other of its kind for stock, because it is a good keeper, notwithstanding it has a soft shell. It is fleshy and very sweet; also very good for pie, and is largely used for canning. On one large ranch in the San Fernando Valley there was planted a large acreage to nearly all the popular varieties; this one was unaffected by the hot sun, and remained in perfect condition while other varieties were sunburned and decayed quickly. **(Per pkt. 5c)** (oz. 10c) ($\frac{1}{4}$ lb. 20c) (lb. 50c, prepaid).

Mammoth Tours.—This is an excellent pumpkin for stock. It is very large and very prolific. It bears a pumpkin at every other leaf. It seems to thrive best on the light sandy soil near Redondo, and in the San Fernando Valley. The pumpkin is oblong in shape and in color is yellow, streaked with green. **(Per pkt. 5c)** (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. \$1.00). Postpaid.

Cashaw or Crookneck.—Productive; color light cream. A good keeper; fine for pie; sweet in flavor. **(Per pkt. 5c)** (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. 85c.) Postpaid

Connecticut Field (The Jack O'Lantern).—Twenty tons to the acre is no unusual yield. If the land has been manured liberally a full crop can be grown among corn. It is a most excellent keeper, and will be sure wealth to all who grow and feed it liberally. **(Per pkt. 5c)** (oz. 10c) ($\frac{1}{4}$ lb. 20c) (lb. 50c). Postpaid.



Kentucky Field or Cheese Pumpkin,
Growing in a Young Orchard

RADISHES

Culture.—Seed may be sown the year round in California. Radishes thrive best in light, sandy loam, made rich with manure. Sow in drills, 10 inches apart. An ounce of seed will sow a hundred feet of drill, 10 pounds to the acre.

Early Scarlet Turnip.—One of the earliest and best sorts for forcing; its color is very handsome; flavor very mild, crisp and juicy; stands a great amount of heat without becoming pithy. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 70c). Postpaid.

French Breakfast.—A splendid variety, medium-sized, olive-shaped, very crisp and tender; of a beautiful scarlet color. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.

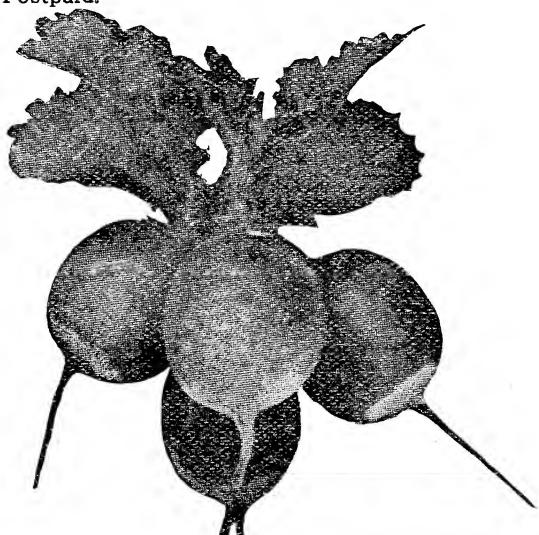
White Tipped Scarlet Turnip.—An early variety, of medium size and excellent flavor, and of a very handsome appearance. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. 80c). Postpaid.

Epicure Radish.—Ready for the table within three weeks; always crisp, a delightful relish. The small round red and white radishes make a pretty showing. Price—(Pkt. 5c) (oz. 15c) (lb. \$1.00).

Chartiers.—A distinct, exceedingly handsome and attractive sort; color of top is scarlet rose, shading into pure waxy white at the tip. Attains a large size before it becomes unfit for the table. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.

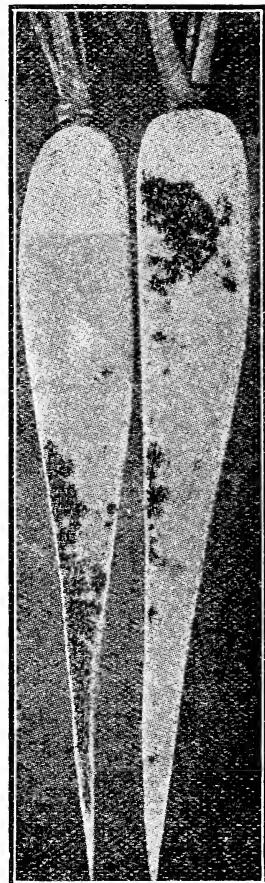
Early Long Scarlet.—Very brittle and crisp; color a bright scarlet; small top. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.

Long White Icicle.—For the home garden we consider this a most excellent table variety. Its extreme earliness, beautiful pure white appearance, excellent flavor and crispness should make it a favorite everywhere. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.



Scarlet Turnip White Tip Radish

No other vegetable on the market classed as "bunch goods" is grown more extensively than radishes; they may be seen every morning the year round at all the markets. No vegetable is more delicious, appetizing and health-giving. We are constantly receiving words of praise for the purity of our radish seed, and for our effort to instruct the grower to plant the right variety at the right time, and for each particular use. But if your soil is mellow to a depth of two feet, plant All Seasons radish at all times. It is best for cooking, and good as any to eat raw.



Long White Icicle

Crimson Giant Turnip.—A variety extraordinary in that, while growing to an unusually large size, it is always tender, crisp and of mild flavor. It remains in perfect condition a remarkably long time, and, unlike other forcing varieties, does not become pithy even when twice their size in diameter; root turnip shaped; color a beautiful crimson carmine; flesh firm, crisp and tender. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

RADISHES—Continued



All Season

Long Black Spanish.—A delicious, crisp winter radish. It sells well at the market. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.

Large White Chinese Stump Rooted.—This is a winter radish of deliciously sweet flavor; can be eaten as a turnip as it is without stringency. The Chinamen use this variety exclusively. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. \$1.00). Postpaid.

Half Long Scarlet.—This variety should be more popular because it is just the right size for table use, not too large, never pithy, but always crisp and sweet. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. \$75).

Mixed Radish.—This mixture, consisting of almost every known variety of radish, is deservedly popular throughout the country because it grows radishes suitable to each season and to every condition of soil. You are sure to have them early, medium and late; small, medium and large—something all the time. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

HORSE RADISH

Common Variety, Roots.—(1 doz. 15c; by mail 20c) (100, \$1.00) (1000, \$8.00).

New Bohemian Horse Radish.—A valuable recent introduction of the U. S. Department of Agriculture. It is a much more rapid grower than the old variety in general use and is therefore ready for use a great deal earlier. Its large, white roots may be raised in almost any soil. The quality of this horse radish is far superior to the old variety. Roots—(Doz. 30c). Postpaid. (\$15.00 per 1000 f. o. b. Los Angeles).

Why will you allow Los Angeles buyers to import several carloads of horse radish from the East each season when you can realize \$400.00 to \$600.00 per acre? It is an easy crop to grow and inexpensive.

See our Columbia planter and be convinced it is the most economical as well as the most reliable seed sower on the market.

For cut worms use Cut-Worm Killer.

ALL SEASON RADISH

A new one from Japan called "Tokishiraza," meaning all-the-year. It is a very large, long, snow-white radish; deeply rooted, does not extend above the soil, hence it is always tender and crisp and has a delicious flavor. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Prepaid.

Japanese Summer Radish.—This radish was introduced here by the Japanese several years ago. Its beautiful white color and mammoth size attracts great attention. It is very tender and the flavor is excellent and mild. It attains perfection in California, growing twenty-six inches in length and three inches in diameter. It is a profitable radish to grow, as it sells readily and is relished by all. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

Japanese Winter Radish.—This was introduced in the same manner as the Japanese Summer Radish, which it resembles except in size. It is more crisp and of better flavor in the winter season. It is pure white, grows about eight inches long and not as tapering as the larger one. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

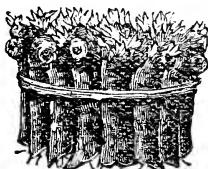
China Rose.—A delicious radish, crisps, with little tendency to become pithy. A beautiful coloring from light red at the top to almost pure white at the tip. It is a good seller and is in great demand by the vegetable peddlers. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. 90c). Postpaid.

California Mammoth.—Pure white; the flesh is tender, sweet and crisp, keeps well. Plant from September 1st to January. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. 90c) Postpaid.

Round Black Spanish.—Skin black, flesh white, of firm texture. Per (pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (lb. 75c). Postpaid.



China Rose



RHUBARB

Culture.—Sow the seed early in spring in drills, one foot apart, thinning out the young plants to 4 inches. Cultivate well, and in the following spring transplant into deep, rich soil from 3 to 4 feet apart. For immediate use order the roots instead of the seed, as they will come into use in two months.

Winter Crimson.—Might be more appropriately called All Seasons Rhubarb. It thrives luxuriantly all the year round, but is better during our winter months than in the summer. To get the best results, apply large quantities of stable manure and water freely. The seed is scarce and the price much higher than common varieties.

Price—(Pkt. 10c) (oz. 80c) ($\frac{1}{4}$ lb. \$2.75) (1 lb. \$8.00).

WAGNER'S GIANT RHUBARB

This is a new strain, propagated by J. B. Wagner, and has the same general characteristics as the Winter Crimson Rhubarb, excepting that it grows four times as large. The stems often weigh $1\frac{1}{4}$ pounds each. I have picked at one time from a single plant sixty full-grown stems that weighed 30 pounds, or one-half pound per stem. This variety has all the good qualities of the Crimson Winter, does not run much to seed—hence they must be propagated by subdividing the crowns. Parties who get plants now will surely reap a rich harvest, as it is bound to take the place on the market now occupied by other winter sorts as soon as plants can be secured. The stems are as tender as any known plant, do not have to be peeled, are not coarse or stringy, cook readily, are of good color, but not so red as Crimson Winter. The plant grows vigorously at all seasons of the year, but is at its best from October to May. This variety is about four times the size of the smaller sorts of rhubarb, producing large marketable rhubarb in four to five months from time of planting seed. It has made this record both in Texas and in California.

Price—(Per pkt. 20c) (oz. \$1.00) ($\frac{1}{4}$ lb. \$4.00) (lb. \$12.00). Postpaid.

RHUBARB ROOTS

Winter Crimson—(10c to 25c each) (\$1.00 per dozen). Postpaid.

Wagner's Giant Seedling—(25c each, postpaid) (\$2.50 per dozen, postpaid).

ROSELLE

Culture.—Sow seed early in April, in the field, four feet apart, in rows six feet apart. Cultivate as Okra. There is an early and a late Roselle. Be sure to get the early variety because the frost is almost sure to destroy the late variety before it matures. We offer only the early variety.

Roselle or Lemonade Plant—Is an annual plant that has been sufficiently tested to indicate its great value and to warrant more extended cultivation. The fruit is used for making jelly and jam. The jelly is superior to guava or currant, and is labeled as "Queensland Jelly," is shipped from Australia to all parts of Europe. It is easily grown from seed if planted after the ground is warm; grows rapidly, resists drought and is very ornamental. Every home garden should have a row of this ornamental and useful plant. (Per pkt. 10c) (oz. 50c) ($\frac{1}{4}$ lb. \$1.50) (lb. \$4.50). Postpaid.

We have been advised by a lady from Texas, also one from Cuba, to remove the seed pod the jelly is thus greatly improved. The calyx is an excellent substitute for cranberry sauce or pie.

Having received numerous inquiries how to use Roselle, we have decided to insert the answer here. Pick the pods that grow at the junction of each leaf. Boil them until soft and strain through a cloth. Add $\frac{1}{2}$ pint of sugar and the juice of $\frac{1}{4}$ of a lemon to each pint of juice, and boil again until it jells.



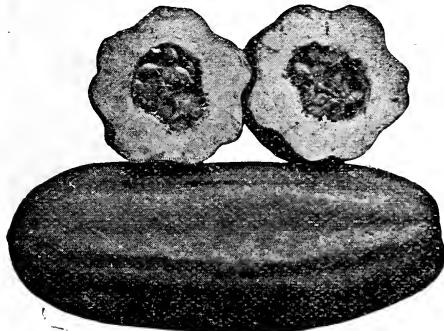
Wagner's Giant

SQUASH

Culture (see page 29).—Seed should not be planted until all danger of frost is past. Plant in hills 5 feet apart for bush varieties and 6 to 8 feet apart for running sorts, putting 6 to 8 seeds to the hill, finally leaving but 3 plants. One ounce of the bush varieties for 40 hills, or of the larger seeded varieties 15 hills, 2 or 3 pounds to the acre.

Green Warted Hubbard.—This is the squash that is so popular everywhere, and Southern California ships annually about 70 carloads to Eastern cities. The local bakers consume annually about 200 tons. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

Fordhook Squash.—This is a most desirable squash for either summer or winter use. The vines are of strong, vigorous growth and wonderfully productive. Fruits oblong in form, eight to ten inches in length, slightly ridged; smooth, thin, yellowish skin; flesh very thick and of a light yellow color. If gathered young for cooking, no other squash approaches it in flavor, while if allowed to ripen on the vine they can be stored and will keep in excellent condition until late the following June. Either for baking like sweet potatoes or making pies during the winter, the quality is very fine. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. 90c). Postpaid.



English Cream Marrow

from one season to another. (Per pkt. 10c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25). Postpaid.

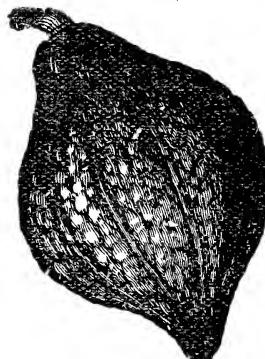
Acorn.—Every home garden should have a few hills of this delicious squash. For table use or for pies it is unsurpassed by any squash. Its convenient size, uniform shape and bright red color makes it a desirable ornament for the table.

Receipt.—Remove the blossom end, take out all the seed, and bake in an oven. When baked, remove the edible portion, season and serve in the shell. In this way it looks like a huge acorn, and is quite ornamental.

Price—(Pkt. 5c) (oz. 20c) ($\frac{1}{4}$ lb. 60c) (lb. \$1.75).

Money in Growing Squash and Pumpkins.—The canners consume enormous quantities. They use principally the Estampes and Large Cheese pumpkins, paying about \$4.00 per ton. Next to the canners are the bakers, who use Hubbard Squash and Small Sugar, paying about \$10.00 per ton. The shipper accounts for a good many carloads at market price at time of shipping, but for Hallowe'en plant the Connecticut Field (Jack O'Lantern) pumpkins, which variety is also good for pies, and sell for \$20.00 per ton.

The Sandwich Island Pumpkin is the best keeper.

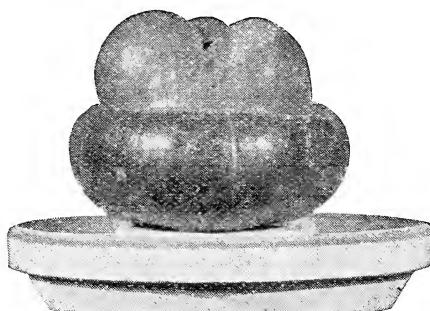


Green Warted Hubbard

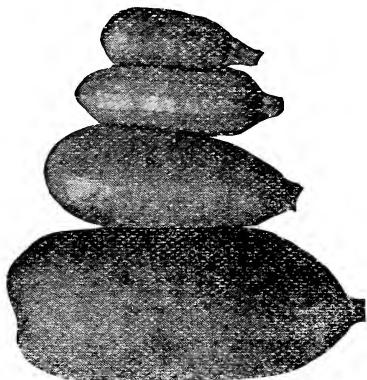
Golden Hubbard.—The flesh is of a deep golden yellow—a much richer color than the Hubbard—fine grained, cooks very dry, and is excellent flavor. In its keeping qualities it is fully equal to the green variety. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

Pike's Peak or Sibley.—An excellent winter squash. Fine grained and superior in flavor and keeping qualities to the Hubbard squash, but not so well known. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

English Cream Marrow.—It is as sweet as a sweet potato, and has none of that pumpkin flavor. It is good any way it comes on the table, and is better than Hubbard Squash for pie. It is 6 to 8 inches long and half as thick. (See picture.) Decidedly firm, it will keep from one season to another. (Per pkt. 10c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25). Postpaid.



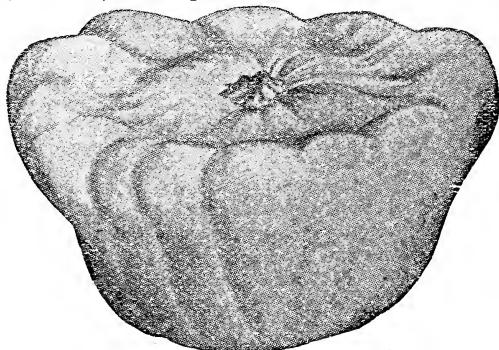
Acorn Squash

SQUASH—Continued.**Italian Squash**

Banana.—The squashes grow from one to two feet in length. The skin varies from a bright yellow to a dark olive green.

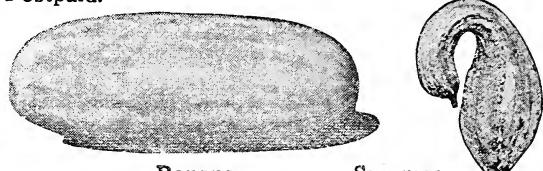
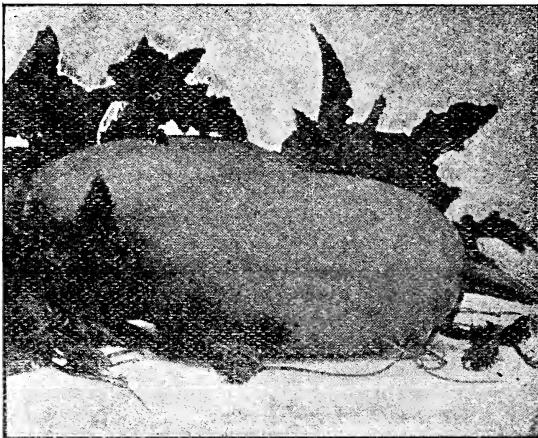
Flesh firm and solid, of beautiful orange-yellow and excellent quality. Mr. E. L. Van Ripper says it is the sweetest of all squashes and wishes everyone to try it. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

Long White Marrow.—This is exceedingly delicious as well as the most prolific of all English Marrows. Steamed when quite young or fried as egg plant it is equal to egg plant itself. The squash is about 12 inches long when mature and has a light creamy color. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

**A. & M. Improved White Bush Scallop**
(Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 35c) (lb. \$1.00). Postpaid.

If in doubt when to plant and what to plant, see the inside of last cover and for particular information, write us stating just what you want to know. Read inside front cover.

For mildew and other diseases of squash and cucumber vines spray frequently with a weak solution of Bordeaux Mixture. A cupful applied to the root when the vine is six inches or longer will prevent root disease.

**Banana****Summer Crookneck****Long White Marrow**

A. & M Improved White Bush Scallop.—As will be seen by the picture, this squash is similar to the well known White Bush Scallop, but it is more elongated toward the blossom, which makes it more desirable from the gardener's point of view. It looks better and sells more readily. It is very prolific. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. 75c). Postpaid.

Golden Summer Crookneck.—The popular well known Crookneck. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c) (lb. 85c). Postpaid.

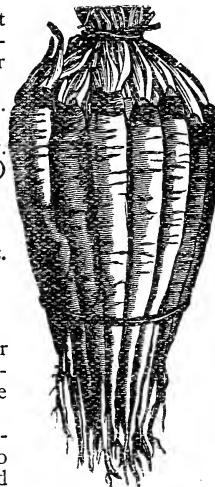
Boston Marrow.—Fresh, bright orange or rich salmon color; for sweetness and excellence, is unsurpassed.

SALSIFY

Culture.—Sow the seed in the spring in drills one foot apart and one inch deep, thinning out plants to four inches. It succeeds best in light, well-enriched soil. One ounce of seed for 50 feet of drill.

Long White.—Favorite market variety and the best flavored. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 50c) (lb. \$1.50). Postpaid.

Mammoth Sandwich Island.—A larger and superior variety. Mild and delicately flavored. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 50c) (lb. \$1.50). Postpaid.



Salsify

Broad Leaved.—This is the best variety. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25). Postpaid.

SORREL

Broad Leaved.—This is the best variety. (Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25). Postpaid.

SPINACH

Culture (see page 29).—Sow in drills, one foot apart, and for succession every two weeks; as it grows, thin out for use, keeping clean of weeds. It grows the year round in California. One ounce of seed for 100 feet of drill; 20 pounds to an acre.

A. & M. Summer Success.—For several years we have endeavored to secure a type of spinach that would prove profitable to grow in summer time, and after several trials this one proved the greatest success. With moist, loamy or peat land the A. & M. Summer Success will grow leaves 14 inches long. The leaves are very meaty and crisp. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 20c) (lb. 60c). Postpaid.

Prickley Seeded, or Winter Spinach.—This variety thrives best in the coldest weather, and is the money-maker for the market gardener. Our seed is imported from Holland, and for ten years has given entire satisfaction. The leaves are large, fleshy and very tender. (Per pkt. 5c) (oz. 10c) (lb. 40c). Postpaid.

Round Summer.—Leaves thick and fleshy, not as large as the winter variety, but better for summer growing in damp land. (Per pkt. 5c) (oz. 10c) (lb. 40c). Postpaid.

A. & M. Improved Thick-Leaf Spinach.—This new variety is one of our valuable introductions and has proven its superiority over all other varieties for beautiful large thick-leaved bunches that bring double the returns to the grower; sells more readily to the peddler and pleases the housewife. For canners no other variety is equal to it. **Price**—(Pkt. 5c) (oz. 10c) (lb. 40c).

Long Standing.—This is a good sort for market gardeners because it is slow to shoot to seed, and the quality is equal to the best winter variety. (Per pkt. 5c) (oz. 10c) (lb. 35c). Postpaid.

TOMATOES

Culture (see page 27).—Tomatoes do best on light warm, not over-rich soil, and success depends upon securing a rapid, vigorous and unchecked growth during the early part of the season. Sow in hot-beds from 6 to 8 weeks before they can be set out of doors, which is when danger from frost is past. Transplant carefully and cultivate well as long as the vines will permit. In order to have tomatoes the greater part of the year, plant different varieties at different times. Unless frost and excessive rains kill vines, you will have ripe tomatoes all the year. Tomato-growing in Southern California ranks equally with cabbage and celery. While a large percentage are shipped to Eastern cities, most of them are used by our local canneries. Before purchasing your seed, always secure our advice as to the variety, stating whether for shipment, canning, or for the local market.

A. & M. First Early.—See page 27.

Ponderosa or Beefsteak.—A very large pink tomato of excellent flavor, almost solid, having very small seed cavity. A favorite in family gardens, but too soft to can or ship. (Per pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.15) (lb. \$3.50). Postpaid.

Home Tomato.—See page 27.

Coreless.—A bright red, globe tomato; very desirable for the family garden, almost without seed or core. (Per pkt. 5c) (oz. 40c) ($\frac{1}{4}$ lb. \$1.25) (lb. \$4.00). Postpaid.

The Boulder.—Grown side by side with the Stone, the only difference is the enormous size of the fruit. We have received numerous testimonials praising it, none unfavorable. Mr. S. J. Murdock of Westminster says of it: "I never saw anything to approach it in productiveness and all round good qualities." (Per pkt. 10c) (oz. 50c) ($\frac{1}{4}$ lb. \$1.25) (lb. \$4.00). Postpaid.

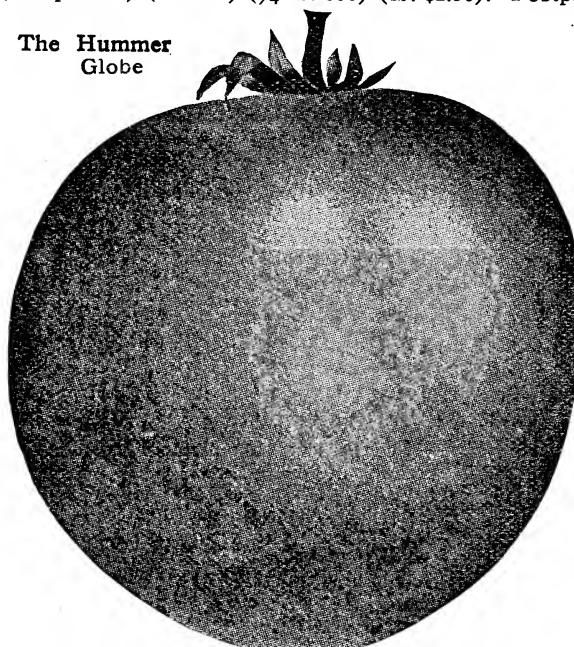
To prevent blight use Bordeaux Mixture after each rain. It is a good tonic for the vines.

TOMATOES—(Continued)

The Stone

This is the most popular tomato in Southern California. Fully one thousand acres are planted to this variety exclusively for shipping to Eastern points after other tomatoes have been destroyed by frost. For this purpose the seed is planted about June 15th, and the tomato brought to full size about October 1st, after which it gradually ripens as wanted for shipping. The tomato is of good size, bright red, solid and smooth, enormously productive. Our seed was grown apart from any other variety and we confidently say no more perfect field of Stone Tomatoes ever grew anywhere than the field from which our seed was taken. (Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 80c) (lb. \$2.50). Postpaid.

**The Hummer
Globe**



Pink in color, smooth and solid, making it a good shipping variety. This has proven very satisfactory in Arizona. Its dense foliage protects the fruit from sunburning. (Per pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50). Postpaid.

Golden Beauty.—A large yellow tomato of delicious flavor, and when preserved with a slight flavoring of lemon, is better than preserves made of any other tomato, because it lacks the strong Tomato flavor. It is an excellent variety for salad. (Per pkt. 5c) (oz. 35c) ($\frac{1}{4}$ lb. \$1.00). Postpaid.

Yellow Egg.—Excellent for spicing and preserving. Small yellow egg-shaped tomato of mild flavor. (Per pkt. 5c) (oz. 25c).

Dwarf Stone.—(Tree tomato). Large, red, smooth and solid. The stalk is upright, with dense foliage protecting the fruit from the heat of the sun. It is a desirable tomato to grow in the interior valleys. Price—(Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50).

Chalk's Early Jewel.—Excellent early tomato for home or nearby market; very prolific, red, smooth, and desirable size. Its mild flavor makes it desirable as a salad. Price—(Pkt. 5c) (oz. 25c) ($\frac{1}{4}$ lb. 75c) (lb. \$2.50).

TOMATOES—(Continued)



Grape Tomato

Red Pear Shaped.—Used for preserving and spicing. (Per pkt. 5c) (oz. 25c).

Grape Tomato.—It makes an attractive arbor vine with a profusion of delicious fruit for preserving. (Per pkt. 5c) (oz. 25c).

Cherry Tomato.—The fruit clusters are somewhat like the Grape Tomato, but are larger, about the size of a large cherry. (Per pkt. 5c) (oz. 50c).

Ground Cherry.—Grows like a tomato; fruits like a tomato, but the small fruit is enveloped with a husk. It is good for preserves. (Per pkt. 5c) (oz. 30c).



Grape Tomato

TURNIPS

Ask for our Garden Manual. It is free with your first order for seeds.

Culture.—(See page 29.) Turnips may be sown broadcast on damp sandy soil, or in drills as beets and carrots. Drill in rows ten inches apart, not too thick in the row. The Purple Top Globe variety is now leading in popularity because of its mild flavor and its adaptability to our summer climate.

Early Purple Top Strap-Leaf.—A very popular variety in this section for either family or market use; large size, white, purple above ground; flesh fine grained. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) 1 lb. 75c. Postpaid.

Early White Flat Dutch.—An early white-fleshed strap-leaved variety; for quick growth, mild flavor and excellent quality. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

Early White Globe.—A large, round turnip, with sweet flesh. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

Extra Early Purple-Top Milan.—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (lb. \$1.25). Prepaid.

Golden Ball or Orange Jelly.—A rapid grower of excellent flavor; bright yellow color; good keeper and a superior table variety or for stock. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

Improved Purple-Top Rutabaga.—The best of the Swede Turnips. Very hardy and productive; flesh yellow, of solid texture, sweet and well flavored. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 20c) (1 lb. 60c). Postpaid.



White Flat Dutch

Purple Top Globe.—Solid, very sweet, slow to get pithy. The very best variety for the summer season. Indeed, the best for any season, but slower to mature than the Strap-Leaf. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.

Snowball.—Next to the Purple Top Globe in popularity, but preferred by many because of its beauty and excellent flavor. It is slow to get pithy in the summer, but always crisp during the winter. Price —(Per pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 35c) (1 lb. \$1.00).

14 Top Turnip.—This is a good turnip but prized chiefly for its tops, which are cooked as greens. Also used as pasture for stock. (Per pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 25c) (1 lb. 75c). Postpaid.



Purple Top Globe

Grow turnips all the year round, but they are better, more crisp and sweet when grown during the winter months. Plant globe varieties in summer because of the large tops, which affords protection from the heat of the sun, and flat varieties in winter time, because of the short tops.

READ THIS

The foregoing pages comprise a list of all vegetables and farm seeds offered by us, all of which have been tried and proven to be adapted to climatic conditions of the Southwest and Mexico. BUT always have in mind, each season, even each month requires not only different varieties of seed but different strains of the various varieties. For instance, New York Special Lettuce is the best of all when planted from August 1st to February 1st, but planted at other times is very inferior while Marblehead and Iceberg Lettuce are best suited to the summer months. This applies only to the climate of the Southwest. These varieties do not grow profitably in the East. What is true of lettuce will apply also to potatoes, beans, melons, onions and many other vegetables.

It is our knowledge of these conditions and our eagerness to impart this information through these pages that makes this catalogue more valuable to the gardener and rancher of the Southwest and Mexico than any other.

FERTILIZERS

WIZARD FERTILIZER—Register No. 68

By authoritative analysis one ton of Wizard contains: 12 times more Nitrogen, 10 times more Potash, 50 times more Phosphoric Acid than one ton of manure.

Wizard is always the same, is soluble and free from any filler, has all the plant food elements. It is uniform, odorless, will keep indefinitely, can be used perfectly in a drill, and will not leach out of the soil.

The amount used in comparison to others makes it the cheapest on the market in price, because only half as much of Wizard is required to attain results.

Directions: For the small gardens, use two pounds to 100 feet of row on all vegetables. For large gardens use 200 lbs. per acre. For lawns use 25 lbs. to 1200 square feet. For potted plants a scant teaspoonful.

Sold only in 2-lb. packages, 25c per package, and in 25-lb. bags, \$1.75 per bag.

GYPSUM—(What It Does)

"It produces changes in both the physical and the chemical character of soils. It acts chemically upon soils by decomposing vegetable and mineral matter already present in the soil and changing them into forms which are available as food for the plant. Thus, gypsum acts upon insoluble mineral substances containing potash, etc., and converts them into soluble forms. Gypsum aids in the decomposition of animal and vegetable matter, such as vegetable mould, stable-manure, etc., and tends to convert them into available plant food."

"It has an indirect fertilizing value which is mainly due to the fact that it has the power of changing unavailable forms of plant-food, especially potash, into available forms."

"A heavy dressing of Gypsum will greatly improve any heavy soil, rendering it lighter and more easily cultivated, and relieve the tendency to crust and bake."

(For Gum Disease)—What Mr. W. R. Gunniss says:

First, I had the roots uncovered to a distance of two feet from the tree. Then I had two or three shovels full of gypsum thrown into the hole, mixing it with a little top soil, then I had the gypsum thrown into the gum on the trees, which adhered and neutralized the condition and forming a new bark and left the hole open until just before rain. They were filled up with earth to prevent the holes filling with water. The result next season, beautiful green laves, full of fruit, no gum, and have ever since been the heaviest bearing trees in the orchard.

Bradley Lawn Fertilizer. Price, (\$2.50 per 100 lbs.) (50 lbs. \$1.25).

A. C. W. Lawn Fertilizer. Price, \$2.50 per 100 lbs.

Sheep Manure.—Price, \$1.75 per 100 lbs.

Leaf Mold.—Fine for mixing in soil for potting house plants. Per sack 75c.

Armour's Plant and Fern Food.—Excellent fertilizer for house plants. An odorless, soluble fertilizer. Put up in 2½-lb. cans. Per can, 25c.

Domato Plant Food.—2-lb. Pkg. 25c.

We have always on hand the best fertilizers for each particular purpose. For lawns, orchard, berries and vegetables. Consult us when you want fertilizer.

Nitrate of Lime.—Runs 13% Nitrogen in a form that is immediately available to the growing tree. This Nitrogen is extracted from the air by means of electricity and put into Lime. In casks weighing about two hundred and fifty pounds. Per cask, \$7.50.

Nitrate of Soda.—15% Nitrogen also immediately available to the crop. Not advisable to get all your nitrogen from this source on account of the Soda content. Price fluctuates. Write for price stating quantity wanted.

Super Phosphate.—17½% available Phosphoric Acid. Most readily available form and about two-thirds soluble. Per 100 lbs., \$2.50.

Bone Meal.—3½% Nitrogen and 16% Phosphoric Acid. Neither of these two elements are immediate in their action. If put in soil in the Fall some results will show the following spring. Slow but sure. Per 100 lbs., \$2.50.

Tankage.—5% Nitrogen and 5% Phosphoric Acid. The nitrogen content will show results in two to three weeks. The Phosphoric Acid is from Bone, results as stated above. This is a Packing House product. Per 100 lbs., \$2.75.

Dried Blood.—12 to 13% Nitrogen. The most readily available form of organic Nitrogen. Quick and lasting in effects. Packing House product. Per 100 lbs., \$4.00.

No. 4 Mixed Fertilizer.—4% Nitrogen, 10% Phosphoric Acid, 1% Potash. A complete fertilizer containing all the ingredients necessary for a quick active growth. Per 100 lbs., \$2.50.

Lawn Fertilizer.—2½% Nitrogen, 5% Phosphoric Acid, 1% Potash. A complete fertilizer that will give quick and very lasting results, if applied twice a year will keep your lawn green all the time. 100 lbs. to 1500 square feet. Per 100 lbs., \$2.50.

Pure Fish Fertilizer.—7% Nitrogen, 4% Phosphoric Acid. Purely organic, an excellent fertilizer for all purposes for an active green growth good for two full crops. Per 100 lbs., \$3.50.

FERGUSON'S

Composite Culture of Nitrogen-Fixing Bacteria

"Living Nitrate Factories for Field and Garden."

Four ounces properly applied to the seed for an acre of ground will put as much nitrates into the soil as can be obtained in **two tons** of high grade commercial fertilizer, with less labor and less expense.

This means **profitable crops on poor or sandy soils, restoration of wornout lands, increased crops on good lands.**

WHAT FERGUSON'S NITROGEN-FIXING BACTERIA WILL DO

1. These bacteria furnish the best and most valuable fertilizer in the world, in unlimited quantities and at only a nominal cost of money or labor.
2. They take nitrogen from the air, convert it into nitrates available for plant food, and then give it to the plant. In return the plant supplies them with carbohydrates, thereby enabling the bacteria to grow and reproduce themselves at an almost incredible rate.
3. They increase crops, under ordinary conditions from 25% to 60%, with no extra work. They make possible profitable crops on absolutely barren soil, such as sea sand or even coal ashes. They also improve the crops on good farm land.
4. They store up on the roots of plants the excess nitrates which the plant does not use. This is done in the form of nodules, varying in size from a mere speck to about a half inch in diameter. Official reports show this reserve supply of nitrates thus stored in the ground has been in some tested cases equal to 850 pounds per acre, or more nitrates than are contained in several tons of the average commercial fertilizer.
5. They gather moisture from the air at the same time that they gather nitrogen, and also make it available for the future use of plants. This enables an inoculated field to withstand some droughts or dry seasons that would otherwise destroy the crop.
6. They work night and day making money for the farmer.

Do not apply the bacteria to the seed in the sunshine or expose to the sunshine to dry after mixing. Remember that strong sunshine kills every form of bacteria. The best results are obtained when planting is done in the early morning or late afternoon or on cloudy days. If you drill the seed in you can plant any time.



Showing NitrogenBacteria

PRICES OF FERGUSON'S COMPOSITE CULTURE NITROGEN-FIXING BACTERIA

Available for Clovers, Alfalfa, Beans, Peas, Vetches, Lupines, Soy Beans, Burr Clover, Peanuts and all Other Legumes

Bottle of bacteria sufficient to inoculate seed for one acre.....	\$2.00
Bottle of bacteria sufficient to inoculate small garden .....	.50
Bottle of bacteria sufficient to inoculate seed for five acres.....	6.00
Bottle of bacteria sufficient to inoculate seed for fifty acres.....	55.00
Bottle of bacteria sufficient to inoculate seed for one hundred acres.....	100.00

USE NITROGEN CULTURE FOR ALFALFA FREE OFFER

In order to encourage the more general use of nitrogen culture and hasten the introduction of this valuable fertilizer, we offer free to all who will plant alfalfa, sufficient amount of Ferguson's Composite Culture to inoculate seed for $\frac{1}{4}$ acre. All we ask of you is to give us your name and address, and to report to us the results you attain as compared with alfalfa grown from seed not so inoculated.

FARMOGERM

WHAT IT WILL DO

A Complete Treatise on Farmogerm Free.

Most expensive of all commercial fertilizers are those used for the addition of nitrogen; furthermore, this element of plant life is the most volatile and is, therefore, easily lost from the soil through evaporation and leaching. Now comes from the chemical laboratory the discovery of practical, commercial means for propagating the bacteria in untold millions, and preserving them for transportation.

Essential to all growth in the vegetable kingdom is the element of nitrogen, particularly to the legumes, which include alfalfa, peas, beans, clover, vetches, foenugreek, etc. So necessary is nitrogen to this family that nature has provided the plants to a greater or less degree with roots which are a natural home for the microscopic nitrogen gathering bacteria which exist to some extent in nearly every soil. It is within a comparatively few years that the real importance of these bacteria has been understood, and efforts made to encourage their propagation. For decades the only remedy for crops suffering for nitrogen was the application of manure or other nitrogen carrying fertilizer.

Farmogerm is applied preferably direct to the seed before planting, by diluting the jelly containing bacteria with water and mixing with the seed. Farmogerm can also be applied to planted fields by sowing a small quantity of inoculated seed, or sprinkling inoculated soil over the area.

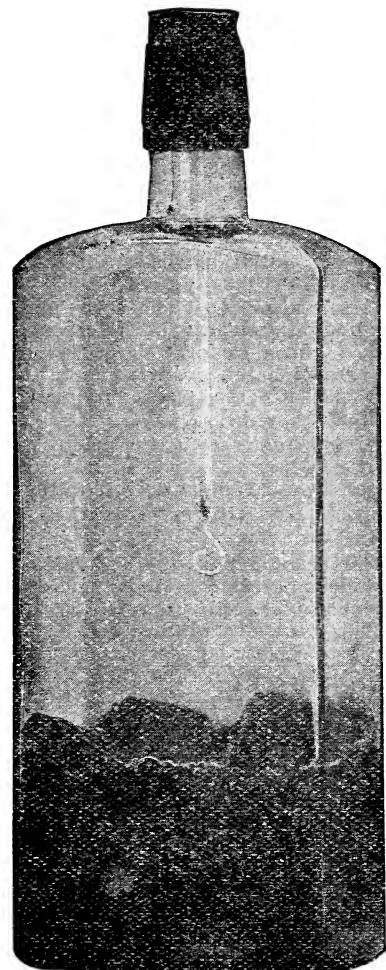
Farmogerm is put up in specific cultures for the different crops—alfalfa, vetch, peas, beans, melilotus, clover, foenugreek, cow peas, soy beans, Canada field peas, red clover, lupins, and all other legumes.

Specify crop to be inoculated when ordering.

PRICES

One acre size	\$2.00
Five acre size	6.00
Garden size .....	.50
Fifty acre size	\$5.00
One hundred acre size	100.00

The best and cheapest fertilizers and all-round soil renovators are the legumes described on page 77; all are nitrogen-gathering plants, and to guarantee the best results the seed should be inoculated with Nitrogen-Bacteria.



A Bottle of Farmogerm

The dark substance at the bottom is jelly in which the bacteria live. Note the air tube extending down from the cork.

According to the United States report on agriculture Los Angeles County is the richest county in the United States with a total farm valuation of \$199,998,200. This is higher by \$52,480,180 than the next highest and only five other counties exceed the \$100,000,000 mark.

Read inside front cover page.

THE GREATEST SOIL RENOVATORS

The sowing of nitrogen-gathering plants for green manuring has become popular because of the excellent results attained and because of its cheapness as a fertilizer that its use is almost universal not only for orchards, but for fields, particularly where melons are to be planted. When in the market, write for price, as it fluctuates from day to day.

Foenugreek for Cover Crop.—No seed germinates more quickly. It is not nearly as susceptible to injury from frost as peas, nor is it attacked by mildew or other diseases. Owing to the rapidity of its germination and good growth during cold weather, a good crop of herbage can be secured if planted as late as February, which makes it of special value to walnut growers. Price on application.

It will thrive on any soil that will grow peas or vetch. It will mature ready to plow under in three months during the coldest season of the year. It is a wonderful soil renovator. Price on application.

White Canadian and Blue Peas.—These excellent soil renovators are well suited to our local conditions. They are hardy enough to withstand the rainy season. They absorb alkali if not too excessive. A luxuriant crop can be grown when planted after January 1st. Price on application.

Vetch.—Probably more Vetch is now planted for a cover crop than anything else. However, it should be sown early, August or September, to secure a good growth before the cold weather of January. While it is very hardy, it requires a longer season than some of the other crops. It is a very satisfactory crop for renovating the soil, because it is a great nitrogen-gathering plant. Price on application.

Whip-Poor-Will Cow Peas.—This Southern Cow Pea has proven to be very satisfactory in this climate. It is a summer forage crop, or just the thing to grow in the late summer to plow under to enrich the soil for a crop of winter vegetables. Price, per (10 lbs. \$1.00) (100 lbs. \$8.00).

Burr Clover.—The native Clover, and one of the best nitrogen-gathering crops and very satisfactory for orchards. There is an increasing demand for Burr Clover, and the seed is very scarce and hard to obtain. It is the very best cover crop for poor or dry land, as it needs but little moisture. Price—(lb. 35c postpaid) (by express or freight, lb. 25c) (10 lbs. \$2.00). Quantity price on application.

Sweet Clover—(Yellow Blooming Melilotus).—Has come to stay with us as a hardy winter-growing cover crop for green manuring in orchards or for recuperating the soil. It will thrive luxuriantly with less moisture and on poorer and harder soils than most other legumes. It sends down a big tap root opening up the soil for irrigation. It produces a big crop of Nitrogen and is a big yielder of humus if plowed under when the stems harden. It will grow five feet high in four months from seed in the coldest part of winter. It is an annual, therefore easily eradicated (if plowed under before seed matures). Price—(1 lb. 30c postpaid) (by express or freight, 10 lbs. \$1.50) (per 100 lbs. \$12.00).

Inoculate your seed with nitrogen-fixing bacteria for all new or worn out soil.

Broad Windsor.—Sometimes called Horse Bean. Grows upright on a single stem, bearing a profusion of large well-filled pods. The roots are enormously productive of nodules. We especially recommend it to hog ranchers. It withstands 28 degrees of temperature. Price, per 100 lbs. \$5.00.

Soja Beans.—Excellent for summer forage for hogs or to plow under. 100 lbs. \$8.00.

Tepary Bean.—Is one of our most valuable legumes. As a soil renovator it has a value not attributable to any other because it is just the thing to reclaim desert lands for the homesteader. It will grow with surprising luxuriance by dry farming methods, requiring less moisture than any other legume. We give it our unreserved endorsement as a soil renovator for summer planting wherever irrigation water is scarce. Ten pounds will plant an acre. Price, per 100 lbs. \$12.00.

The above legumes are decidedly the best cover crops and soil renovators for green manuring that have yet been introduced; but you should exercise great caution to select the right legumes best suited to your soil, your purpose and time of planting. When in doubt consult us; we will endeavor to advise you correctly.

Common Buckwheat.—It is now demonstrated that buckwheat is one of the best cover crops to grow during the summer months. The soil is always moist where shaded with buckwheat. Sow the seed April 1st, about 45 pounds per acre. Within ten weeks it will have matured seed: plow under: the seed will within ten weeks mature another crop. Thus with one sowing of seed you can plow under four crops. It will not survive the winter. Therefore it is necessary to sow once a year. When necessary we advise irrigation about time of maturity, and plow under as soon after irrigating as the soil will permit. Price on application.

CLOVERS

Common Alfalfa.—Our standard clover is probably the most reliable source of income of any of our field crops. If you have horses you want alfalfa. If you have cattle, hogs or chickens alfalfa is the main food. You cannot ranch successfully without alfalfa.

Write for samples and prices, as the market is constantly changing. Price—Per (lb. 25c) (by mail 35c). Write for quantity price.

Peruvian.—Each year adds to the success of this wonderful variety. We have never introduced anything in the seed line that gave such entire satisfaction. Its unusual rapid growth, quick recovery after cutting, and continued growth through the winter in favorable climates, results in the production of one or two more cuttings of hay each year than are yielded by the alfalfa commonly cultivated. The explanation for this is found in the difference in the location of the zero point of growth in the Peruvian and in ordinary alfalfa. The temperature at which Peruvian alfalfa ceases to grow is 48 degrees Fahrenheit, while that of common alfalfa is 57 degrees Fehrenheit. The repeat orders and the testimonials we are receiving from those who were fortunate enough to obtain some of this seed the last four years is further proof of its remarkable superiority over other varieties in a mild climate. Price—Per (lb. 35c) (by mail 45c) (100 lbs. \$26.00).

Mr. John Tweedy, in describing the Peruvian Alfalfa says: "Its superiority is more in evidence when handling it with a fork. It is like fine grass, not woody like the common alfalfa."

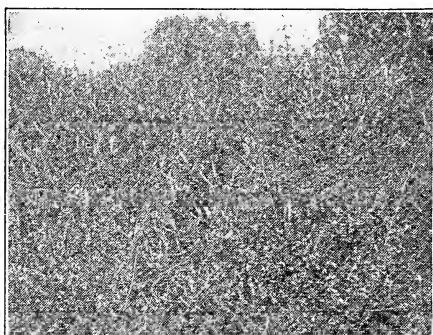
Mr. Houghton says: "Its superiority is in its rapid growth and its superior quality. It responds much quicker than the common alfalfa after a cutting or after irrigation, as well as growing faster at all times."

Write for further testimonials on Peruvian Alfalfa. We feel that the greatest service we can render to the rancher who intends to plant alfalfa is to induce him to plant the Peruvian. It is past the experimental stage. We stake our reputation as expert seedsmen that the Peruvian Alfalfa is superior to all other varieties.

Turkestan.—Is recommended by the government for its drought-resisting qualities, and our observations confirm the government report. Price—Per (lb. 25c) (by mail 35c). Quantity at market price.

Red Clover.—This is the variety grown extensively in the Eastern states, generally mixed with Timothy which adds greatly to its value for hay. Price—Per (lb. 40c postpaid) (10 lbs. \$2.50). Write for quantity price.

Mammoth Red Clover.—Price—Per (lb. 40c postpaid) (10 lbs. \$2.50). Write for quantity price.



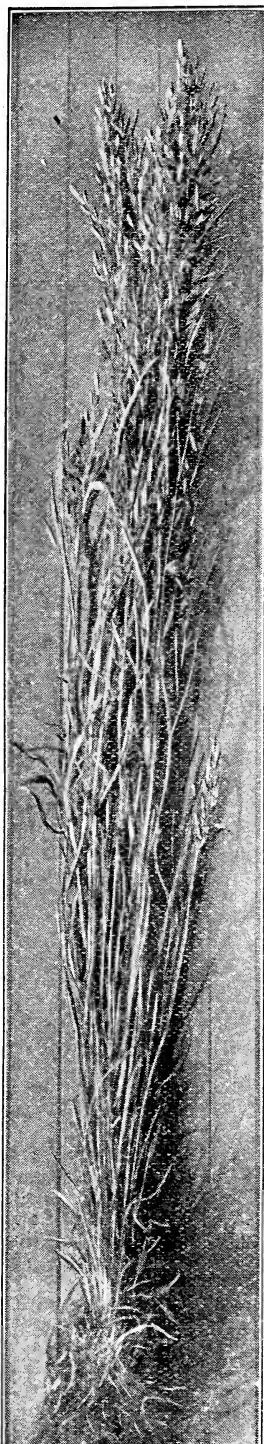
Melilotus Alba seven feet tall grown on a vacant city lot without irrigation.

Sweet Clover (White Blooming Melilotus) (Bokhara).—This is a valuable addition to the farm as a forage crop. When quite young, it may be pastured or cut and cured for hay. This should be done just before the bloom appears. It is hardier than alfalfa, more drought-resistant, and better for renovating the soil. It may be cut twice the first season and three or four times the second season, yielding 2500 to 3000 lbs. of hay each cutting. It is as easy as alfalfa to eradicate, is biennial. Hence it must be seeded every second year. On account of its hardiness to resist extreme cold, heat and drouth it is grown largely in the middle west for pasture. It is highly recommended by the department of agriculture. Price—Per (lb. 40c) (by mail 50c). Write for quantity price.

Alsike or Swedish Clover.—This is one of the hardest varieties known. It is perennial and does not winter kill. It will do better on moist land than any other variety of clover, and is suitable for either hay or pasture. When sown with other grasses, it forms a thick undergrowth and greatly increases the yield. Write for quantity price. Price—Per (lb. 30c) (by mail 40c). Write for quantity price.

Burr Clover.—See page 77.

Alfileria.—(*Erodium Cicutarium*).—One of the most nutritious of plants. All stock relish it, even prefer it to most any other forage. Like Burr Clover, it is native to Southern California, and would be more prevalent were it not so difficult to gather the seed. It requires five pounds of seed to plant one acre. A few pounds of seed scattered over a range would within two years have the place well covered with alfileria. Price—Per lb. 85c, prepaid. Write for quantity price.



Sudan Grass

**UNITED STATES DEPARTMENT OF
AGRICULTURE**
BUREAU OF PLANT INDUSTRY
Forage-Crop Investigation
Washington, D. C.

SUDAN GRASS

Sudan grass is probably the wild original form of the cultivated sorghum. It is a tall grass, growing under favorable conditions to a height of 6 to 10 feet, but when broadcasted thickly it grows only 3 to 5 feet high. The stems are fine, the largest stalks seldom larger than a lead pencil. Where the plants are scattered they stool abundantly, as many as 100 stalks coming from a single root. In general appearance Sudan grass is very much like Johnson grass, but they are entirely distinct, for Sudan grass lacks rootstocks and therefore, never becomes troublesome as a weed. The stems are leafy, perfectly erect, and seldom lodging. The grass cures easily, making hay of excellent quality which is readily eaten by all kinds of stock.

Sudan grass has been grown with marked success throughout the semi-arid regions, maturing seed even in South Dakota. Under irrigation it has also shown much promise, and two or more cuttings can be obtained where the season is long. Sudan grass is very drought resistant and will succeed wherever it is possible to grow any other sorghum. It is considerably earlier than the earliest Amber sorghum, and so will probably mature as far north as the Canadian line.

From the standpoint of utility Sudan grass can be compared to the millets, making a large crop of hay in a short season of warm weather.

It is preferable to the millets, however, in that the hay is much superior and can be fed to all kinds of stock without injury to them. While it is closely related to the cultivated sorghums, it has very fine stems, enabling it to be cured into hay readily.

GROWING THE CROP.—Sudan grass may be grown either drilled, in cultivated rows, or broadcasted. If planted in cultivated rows, the rows should be as close as possible and yet permit of easy cultivation. In 30-inch rows 2 to 3 pounds of seed per acre is ample, and under conditions of low rainfall this method is recommended. Under humid conditions 18-inch rows are preferable and three to four pounds of seed per acre is sufficient.

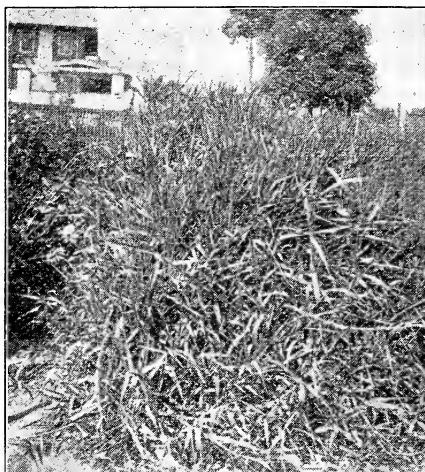
For broadcasting six to eight pounds of seed per acre should be used. The seed should not be sown until the ground is warm, that is about the time for planting corn. The young plants will withstand slight frosts without injury.

HARVESTING THE CROP.—The hay should be cut as soon as the grass is fully headed, and early cutting is especially advisable where two or more cuttings per season are expected. The grass can be cut with a mower, but more conveniently with a binder, especially in dry regions, as the hay cures very readily in bundles.

The value of Sudan Grass to the rancher is even greater than alfalfa. It will yield 12 to 16 tons per acre in one season; can be baled as hay and the dry hay is relished by all stock. **Price—Per (lb. \$1.00 post-paid).** Write for quantity price.

*Sudan grass grows eight feet high in nine weeks with irrigation in Lancaster Valley.

GRASSES—(Continued)



**Parra Grass grown without irrigation.
Second year.**

This picture, taken October 1st, illustrates a clump of parra grass from two-year-old roots, having had no water since March.

We now have grasses for every condition of soil and climate. The forage question is now satisfactorily solved. Consult us when in doubt.

Parra Grass.—The grass for marshy land. This grass comes from Vera Cruz, Mexico, and is not propagated from seed, but from the stems that are doubled and planted where wanted. This grass was recommended to us by a large cattle-man of Vera Cruz, who says of it: "The picture shows the grass at four months' growth taller than a man. All stock relish it; it is sweet and succulent, and when established, will stand any amount of pasturing or cutting for hay. It thrives best on heavy wet or damp land. We have a limited amount of the grass which we procured from Vera Cruz. It was sent us like a sheaf of wheat, wrapped in burlap, was fourteen days in transit, yet every stem took root when planted. It multiplies rapidly. The experimental patch on our trial ground demonstrated it will withstand considerable alkali. If well watered until the latter part of June it will remain green the balance of the dry season, and if cut as late as August it stools wonderfully and grows without irrigation. With the same amount of irrigation usually given alfalfa, Parra Grass may be cut as often and yield much more hay. There can be no better pasture for the dry season, with or without irrigation, provided it has a good start.

It is just the crop for overflow lands because it will grow under water, thus establishing a good pasture by the time the land is dry enough to turn the stock onto it.

Mr. Horace Metcalf, of Los Angeles, who has been growing it for five years in Los Angeles County, and is familiar with it in Mexico, states: "It does not go to seed in this climate. It may be cut three times in one season and produce twenty tons of hay per acre for the season. It cannot become a pest on dry land, but on wet land it would be difficult to destroy it. It cannot be drowned or destroyed by overflow. It is just the thing for damp or irrigated lands. We cannot recommend it too highly.

We offer a limited quantity at 25c for 25 stems by mail postpaid, 100 stems for 75c postpaid, 1000 stems \$2.50 f. o. b. Los Angeles.

Timothy.—Does very well in moist land and will mature a fine crop of hay in 110 days from seed. We do not recommend it for Southern California. Per lb. 25c prepaid. Write for quantity price.

Bermuda Grass.—Excellent for pasture meadows, but a pest on the farm or in the garden. Withstands drought and grows luxuriantly when irrigated. Sow 10 pounds per acre. Will stand more pasturing than any other grass we know of. Price—Per (lb. 85c) postpaid.



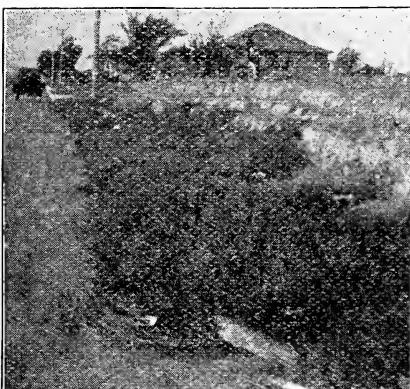
**Parra Grass (with irrigation) 8 feet tall,
4 months from planting one stem 6
inches apart in the row.**

GRASSES—(Continued)

Paspalum Dilatatum.—From Australia. Just the thing to reclaim marsh lands, and equally good to survive drought. It has been to the Australian dairymen what alfalfa is to the California dairymen. It survives extreme cold, and in Southern California it grows the year round, thus insuring green pasture all winter.

Mr. Sullivan, dairyman of El Monte, planted it on land too wet and soft to allow his cattle to pasture upon it. Alfalfa would not survive. He sowed Paspalum on ridges between alfalfa checks. The first season only demonstrated it would grow throughout the winter. The second season proved its worth. It had seeded to a wonderful degree. The seed grew, taking root among the weeds and devil grass, choking out everything in its way. The dense tufts of grass made a thick mat capable of supporting the cattle. Mr. Sullivan cut it three times during the season, each time getting about one ton of dry hay to the acre. The stock relish it fully as well as alfalfa. It makes a fine hay free from any wood. It is as easy to eradicate as timothy or any other bunch grass. Seven pounds are required to plant an acre. Price—(\$1.00 per lb. prepaid). Write for quantity price.

Italian Rye Grass.—Excellent for damp land; grows rapidly; makes good hay, but is at its best in moist, low lands. It grows continuously until allowed to run to seed. Dairymen having moist land should avail themselves of this valuable pasture. Price—(Per lb. 25c prepaid) (100 lbs. \$10.00) Write for quantity price.



Salt Bush as it grows by the roadside without moisture.

Perennial Rye Grass.—Very similar to Italian Rye Grass, but will resist more drought. It survives the dry season and starts new growth when the rains set in. Price—Per (lb. 25c prepaid) (100 lbs. \$10.00). Write for quantity price.

RHODES GRASS

Something new from South Africa. This grass has been thoroughly tested in Australia and promises to supercede the popular Paspalum.

Prof. Maiden, the Government Botanist of Australia, says of the Rhodes Grass: "It is ideal for ensilage. It yields five tons per acre."

"It smothers Nut Grass. It is a good grass for green food. It is an excellent grass for hay. It is a rapid grower. It has fibrous roots so that it is not likely to be

a nuisance, since it can readily be eradicated if required. The seeds germinate readily. It runs six to eight feet, and then grows erect. It is very palatable to stock. If it has any objectionable features I do not know of them, and, therefore, I have recommended experiments with it in many parts of the State. Experiments that have already been made, prove that it will stand the fierceness of frosts, and the seed has not been found at all injurious to stock; in fact, the animals like it."

It is just the grass for a dry hot country. Sow ten pounds of seed per acre. Price—(\$1.00 per lb.) postpaid. Write for quantity price.

Salt Bush (Atriplex Semibaccatum).—This is the common Salt Bush; will grow on any soil, even in the strongest alkali, and will thrive luxuriantly for years without rain, absorbing its moisture from the air. Plant the seed on any waste land and turn the place into profit. If interested, write for particulars. Price—Per (lb. 85c) postpaid. Write for quantity price.

Orchard Grass.—Price—Per (lb. 40c prepaid). Write for quantity price.

A WORD ABOUT GRASSES

We offer on these pages ten grasses, each one of which requires certain conditions of soil and climate, but each one is valuable where conditions are favorable to its growth. But for general conditions such as we have throughout the southwest we have placed Sudan Grass at the head of the list. Rhodes Grass may prove to be equal to Sudan, but it is yet in the experimental state. It is claimed Rhodes Grass will continue growing with less moisture than any of the other grasses except Salt Bush. For permanent all year pasture plant Paspalum, Italian and Perennial Rye grasses. When in doubt write us about it.

NON-SACCHARINE FODDER AND GRAIN

All prices are subject to market change
If wanted by mail add the necessary postage. See inside front cover page.

EGYPTIAN WHEAT



A Field of Egyptian Wheat Grown at McFarland, Cal.

Although introduced only a few years ago, it is now quite generally grown. Each year it becomes more popular because it never disappoints the planter. It can be cut six weeks from planting, and once a month during the entire summer, or two crops of grain may be harvested and yet grow a good crop for pasture. The picture shows what it will do in the San Joaquin Valley. Mr. E. S. Cook, of Imperial Valley, says: "It will grow as thrifty on alkali soil as on any other. It produces from two to three tons of seed per acre. It can be ground into flour or used for stock feed; it is especially adapted to chicken feed, and is an excellent egg producer."

It requires four pounds of seed to sow an acre. Plant as you would Kaffir Corn. Read also what Mr. Alkire says of it:

Gentlemen:—I send you under separate cover a head of Shallu, the Egyptian Wheat. I produced enough seed last year to plant 20 acres, putting it in as a second crop on June 20.

We wet the ground thoroughly, listed 6 pounds of seed to the acre, cultivated twice, irrigated twice, which was one time too many; it grew marvelous, each seed stooled out from 2 to 10 stalks, and made canes 15 feet high, each cane having a head.

We picked out an acre at random, measured it, cut the heads and weighed them and there was 7300 pounds, will not shrink much in the threshing, and is about the biggest crop I ever raised. All classes of stock take to the stalks readily, there are 40 tons of fodder to the acre.

Dwarf Milo made 2700 and Yellow Dent Corn 3000 pounds per acre right alongside of it, and the same care and water. I remain, GEO. A. ALKIRE.

Sow five pounds of seed per acre. Price—Per (lb. by mail 25c) (10 lbs. \$1.00). Write for quantity prices.

FETERITA



The grain has about the same feeding quality as Egyptian Corn or Milo Maize; yields from two to three tons of grain per acre and is a month earlier than Milo Maize. It is bothered very little by birds as they are unable to shell it out and waste it.

The Riverside and Orange County growers report it far ahead of the common non-saccharine crops. Mr. Clutter, of the Antelope Valley is foremost in its praise. He says that for both the excellence and abundance of forage it cannot be excelled when cut young, and for grain it is equal to any in quality, but ahead of others for yield and earliness. Two crops can be

raised in one season, the second crop from

Feterita eight feet high the seed grown on the first crop. The heads are upright. Cultivate as Kaffir Corn Eight pounds of seed is sufficient to plant an acre drilled. Price—Per (lb. 25c pre-paid) (10 lbs. \$1.00). Write for quantity price.

A WORD ABOUT SORGHUM

Mr. Atmore, of Piru, Cal., is authority for the following statement: "For more than twenty years I have planted sorghum about the first of April; about the time it is well seeded I have some hogs ready to fatten for the market. I turn the hogs into the field of sorghum every day toward evening. In this way they eat all they want without waste, and about the time it is all gone the hogs are ready for market. This is all the feed they get for fattening. Saves me much labor, and the exercise is healthful for the hogs. I sow one acre of sorghum for every ten hogs."

TEXAS SEEDED RIBBON CANE

(Also called Gooseneck Cane)

In Texas it has been planted principally to make syrup; but experiments have demonstrated that of all varieties of sorghum none can compare in yield with the Seeded Ribbon Cane, which has yielded about fifty tons of fodder per acre, against 15 tons of other varieties. It grows ten to fifteen feet high, with abundant foliage.

Why should you be satisfied with ten tons of ensilage per acre, when with the same expense you can grow forty tons? Drill in rows $3\frac{1}{2}$ feet apart, using ten pounds of seed per acre.

Write for prices.

RED TOP SORGHUM

This is considered the best variety of all the sorghums. Because of its luxuriant foliage, abundant stooling of tall succulent canes, and large percentage of saccharine it is the best for forage or ensilage, and the large compact heads of grain which readily separates from the chaff adds to its value as food for stock. Wherever the Red Top is known its popularity supersedes all other sorghums. Write for prices.

AMBER CANE

This variety of sorghum has long been the favorite in this section, and has always proven highly satisfactory because of its luxuriant foliage, succulence and enormous tonnage of rich fodder. Write for prices.



Texas Seeded Ribbon Cane

Dwarf Milo Maize is so much superior to the tall variety that wherever it has been tried it is preferred because it stools wonderfully and matures a large head of seed on each stool, producing as much as 3500 pounds of grain per acre, and the stalk being shorter and having more foliage, makes it more desirable for fodder. Dairymen find that the cows will give more and richer milk when fed on it. It is the right crop to plant in young orchards because it will not shade the small trees.

We have Dwarf Milo Maize grown from pedigreed stock. For the past three years the heads were carefully selected in the field before harvesting. Now we have a strain that grows about four feet high and produces forty per cent more than it did three years ago under the same climatic and soil conditions. The heads were selected only from the plants that grew about four feet high and stooled four or five stalks from one seed, each stalk producing a large heavy head.

Per (lb. 25c postpaid) (10 lbs. \$1.00) (20 lbs. \$1.50) (50 lbs. \$2.50) (100 lbs. \$4.00)
F. O. B. Los Angeles.

We also have Dwarf Milo Maize grown in the usual way from stock not selected, that we offer at the market price. Write or wire for price, stating quantity wanted, as the market changes.

White Milo Maize.—It is said to be more drouth resistant than any other non-saccharine forage plant. It will mature a crop of grain with one irrigation. It will yield nearly as much grain as Feterita and equal to it in food value. Price—Per (lb. 25c prepaid) (10 lbs. \$1.00) (20 lbs. \$1.50) (50 lbs. \$2.50) (100 lbs. \$4.00 f.o.b.

Kaffir Corn.—Grows similar to the Milo Maize except the head is upright instead of hanging over like Milo Maize and Egyptian Corn. It will yield two to three thousand pounds of grain per acre. Sow 8 pounds of seed per acre drilled. Price—Per (lb. 20c prepaid) (10 lbs. \$1.00). Write for quantity price.

NON-SACCHARINE FODDER AND GRAIN—(Continued)

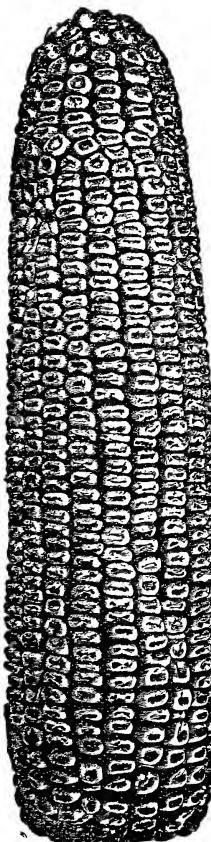
Egyptian Corn.—Like the preceding fodder crops, it is grown chiefly for the foliage to pasture when young, but yields largely of grain. The chief merit of these fodder crops is in their hardiness to produce fodder and grain with almost no rainfall or irrigation. Sow eight pounds per acre drilled. Price—(Per lb. 20c prepaid) (10 lbs. \$1.00). Write for quantity price.

Sorghum.—The first thing a good California farmer will do when settling upon a new homestead is to plant sorghum to supply feed for his stock. Within four weeks from the time of planting he can begin to cut fodder. It is claimed that as high as 10 tons of green fodder have been grown per acre each cutting. It can be cut several times during the season if not allowed to get too high, and makes a good sweet hay. Sow 100 pounds per acre broadcast for best results. Price—(Per lb. 20c prepaid) (10 lbs. \$1.00). Write for quantity price.

Red Cob Ensilage Corn.—Because of its profuse foliage it is one of the best varieties of corn to grow for ensilage or field pasture for cattle or hogs. Price—(10 lbs. 50c) (25 lbs. \$1.00). Write for quantity price.

Sweet Corn for forage.—Sow 100 pounds per acre. Price—Per 100 lbs. \$5.00.

Hog Millet.—Grows rapidly and abundantly. Hogs pastured on Millet need no further fattening. It attains perfection anywhere in the Southwest. Price—(Per lb. 10c) (10 lbs. 75c).



Golden Beauty

Yellow.—Large smooth grains of Golden Yellow color, it pops large, and has excellent flavor and is the most profitable to grow. Price—Per (lb., by mail 20c) (10 lbs. 75c).

About Corn.—More than 2,000,000 bushels of corn is produced in California annually, yet this is scarcely half enough to meet the local demand. This condition ought not exist because there is ample acreage under irrigation with soil suitable for growing corn beside the large acreage near the Coast where corn can be grown without irrigation. Where corn cannot be irrigated plant the "King of the Earliest" variety.

We are listing only those varieties that have been tried here and have proven highly satisfactory. Prices of all varieties of field Corn subject to market change. Price—Per (10 lbs. 50c) (25 lbs. \$1.00) (100 lbs. \$3.50) f. o. b. Los Angeles.

WHITE

Champion White Pearl	100 days
Wisconsin White Dent	110 days
Iowa Silver Mine	100 days
Red Cob Ensilage	100 days
Hickory King	110 days

YELLOW

King of the Earliest	90 days
Pride of the North	90 days
Improved Leaming	100 days
Iowa Gold Mine	100 days
Golden Beauty	90 days
Minnesota King	100 days
King Philip Yellow Flint	90 days

Orange County Prolific.—This white dent variety is strictly a California product and will surpass in amount of fodder or grain any other variety we ever offered. It will readily yield one hundred and ten bushels of grain to the acre; from four to nine fully developed ears to the stalk. We have only a limited quantity; therefore it would be to your advantage to order early. Price—(10 lbs. 75c) (25 lbs. \$1.25) (100 lbs. \$4.00) f. o. b. Los Angeles.

Read This.—Our Pride of the North and King of the Earliest varieties are the most dependable. They are always a sure crop because of their extreme earliness, and they surprise the grower because of the great yield of grain.

Red Cob Ensilage should always be planted by dairymen for the silo.

POP CORN

Rice.—Sharp pointed grain is preferred by vendors, but is not profitable to grow here at usual prices because of the devastations of the worm. Per (lb., by mail 20c) 10 lbs. 75c. (lb., by mail 20c) (10 lbs. 75c).

Pearl.—This is the variety so extensively and profitably grown locally. It yields enormously and at three cents per pound is very profitable, but for several years the grower has received four cents per pound for the entire crop. Per (lb. by mail 20c) (10 lbs. 75c).

Yellow.—Large smooth grains of Golden Yellow color, it pops large, and has excellent flavor and is the most profitable to grow. Price—Per (lb., by mail 20c) (10 lbs. 75c).

MILLET

If desired by mail add the required postage. See inside front cover page. Prices fluctuate from month to month; if large quantity is wanted write for price.

German Millet.—Produces from 4 to 5 tons of hay to the acre, or from two to three thousand pounds of seed. Seed sown in moist land will mature a heavy crop of hay without irrigation. Yields two crops in a season. Sow 20 pounds to the acre. Price—Per (lb. 10c) (8 lbs. 50c).

Common Millet.—It is an annual grass, its luxuriant leaves being very juicy and tender, are much relished by all stock. It makes a very good hay. Sow 30 pounds to the acre. Price—(Per lb. 10c) (8 lbs. 50c).

Pearl Millet or Pencilaria.—Cannot be excelled for fodder when cut quite young when it is tender. When mature the fodder is too coarse and is injurious to stock. The grain is of little value. Price—Per (lb. 20c) (10 lbs. \$1.50).

Hungarian Millet.—It germinates readily and stands great drought. Has numerous succulent leaves, broad and over a foot in length. Furnishes an abundance of green fodder, relished by all kinds of stock. Sow 40 pounds to the acre. Price—(Per lb. 10c) (10 lbs. 75c).

GRAIN

With our up-to-date facilities for cleaning all kinds of seed, we aim to have all field seeds as clean and free from foul seeds as it is possible to make them.

Grain and other field seeds that pass in the open market as clean will often show ten per cent or more of broken grain, foul seeds, chaff and dirt. Should our prices appear higher than others, you will find upon investigation that they are cheaper, because of the purity of the seed.

BARLEY (Sow 80 lbs. per acre)

We aim always to have the best it is possible to procure. We cannot fix a price because of the fluctuations of the market.

Bearded Barley, Beardless Barley and Bald Barley. Write for prices.

OATS (Sow 70 lbs. per acre)

Texas Red (Rust Proof).—This is the only variety that is profitable to plant here. We have this on hand during the planting season.

Texas Red Oats—Grown in Texas.

Texas Red Oats—Grown in California. Write for prices.

WHEAT (Sow 60 lbs. per acre)

Turkey Red.—One of the best for milling, because of its hard, flinty grain.

Sonora.—Generally grown in the interior, thirty miles or more from the coast.

Defiance.—Grown almost exclusively near the coast because it is more nearly rust-proof than any other variety.

Durum or Macaroni.—Highly recommended by the United States Agricultural Department because it withstands drought, and is better adapted to dry farming on mesa lands. It has proven this claim in many places in the arid sections of the country. One grower from Weld County, Colo., writes: "Not a drop of water save a slight rain did my Macaroni Wheat have, yet it yielded 48 bushels to the acre."

Price—(Per lb. 10c; by mail 20c) (10 lbs. 75c) (20 lbs. \$1.50) (100 lbs. \$5.00).

SPELTZ (Emmer Wheat) (Sow 80 lbs. per acre)

A grain for dry lands, introduced from Russia. This is a remarkable grain, and should receive the attention of all farmers. It is a species of drought-resisting wheat, and not inclined to rust. It will produce a fair crop under almost any condition of climate, but grows best in dry prairie regions with hot summers, giving excellent results. Thrives on poor land or stony ground. The Experimental Stations of both the Dakotas report that it resists drought better than oats or barley. All animals eat it green, greedily, and are fond of the straw. No matter how dry the season, speltz is sure to head. You will have grain even if you have but little straw. Sow 70 to 80 lbs. per acre very early, same as barley or oats.

Price—(\$4.00 per 100 lbs.) Write for quantity price.

RYE (Winter) (Sow 50 lbs. per acre)

Grown extensively for early winter pasture, green manuring, and for the straw which is valuable for many commercial purposes. Write for prices.

SILVER HULL BUCKWHEAT (Sow 40 lbs. per acre)

Blooms longer and matures earlier than other varieties; grain of a beautiful light gray color with very thin hull. The bloom is exceptionally good for bee pasture.

Price—(Per lb. 10c) (10 lbs. 60c) (100 lbs. \$5.00) f. o. b. Los Angeles.

Common Buckwheat—See page 77.

Russian Flax will undoubtedly grow as luxuriantly in the Imperial and San Joaquin Valleys as it does in San Luis Obispo county, where it is at its best and yields about two tons of seed per acre. This at a normal value of \$2.25 per hundred pounds, f. o. b. San Francisco, means \$90.00 per acre to the grower, less the freight. This is better than wheat and corn, and no more expensive to grow. Sow 40 pounds of seed per acre. It requires the same culture as Barley. Price (20c per pound, prepaid). Write for quantity price.

RICE

Pictures from Hawaii



A Field of Rice with Irrigating Trough Through the Middle Drying Rice on a Concrete Floor Before Hulling

If interested send five cents to the Supt. of Documents, Government printing office, Washington, D. C. Ask for circular No. 97.

Rice growing as an industry is now established in certain sections of California. It is now only a matter of local conditions.

First, as to soil. It must be level, to make ridges, forming checks same as is done for alfalfa, except that the checks must be made so that the entire area may be submerged any length of time required. Nature of soil should be adobe, clay, silt, or loam underlaid with "hard-pan" to withhold water. On land where there is a heavy coating of alkali on the surface. The field should be flooded as soon as planted and kept under water with a slight but continuous flow, but where the alkali is six inches or more beneath the surface, the roots are little affected. The soil should be pulverized and have sufficient moisture to germinate the seed, and develop a growth of six inches, but irrigate if necessary. Seed may be sown with a grain drill, same as wheat or barley, to a depth of one to two inches, sowing 80 to 90 pounds per acre.

Planted the latter part of April, an early variety will be high enough to flood in June. Then apply the water to a depth of from three to six inches, and hold it there by allowing a very small stream to flow constantly for about three months, when the rice is in the hard dough stage. Drain the water off the latter part of September to allow the ground to dry sufficiently to go on it with horses and binder.

If shocked it will withstand a great deal of rain and weather without hulling. Hot dry winds are favorable when threshing, which may be done with any grain thresher.

Twenty-five hundred to three thousand pounds per acre is a good yield, which sells for about \$80.00 to \$100.

The variety, now accepted as the best for California, is the Wataribune, an early variety imported from Japan. Price—Per (lb. 20c prepaid) (10 lbs. 80c). Write for quantity price.

BLACKEYE BEANS

When in doubt what to plant, plant Blackeye beans. A sure crop anywhere. Inexpensive to grow, little trouble to harvest, always a ready market for a carload. Matures a good crop with or without irrigation. Just the thing for a summer cover crop; a soil renovator, a short crop to plant in your orchards. It is more profitable to grow Blackeyes than growing perishable vegetables at low prices.

If you want quick returns, GROW BLACKEYES.

If you want an inexpensive crop, GROW BLACKEYES.

If you want to benefit your soil, GROW BLACKEYES.

If you cannot irrigate, GROW BLACKEYES.

Grow Blackeyes, but plant forty or more acres, or combine with your neighbors to grow sufficient acreage to produce a carload. You will get a better price for a carload because they can be shipped to any eastern point from your nearest station. Otherwise you would have to pay freight to Los Angeles. The price fluctuates. Write for quantity price when ready to plant.

Plant any time from April 1st to August 1st.

Always inoculate the seed with Nitrogen Bacteria. By so doing you will greatly increase the yield and improve the soil for succeeding crops.

Price fluctuates. Write for price when wanted.

The above advice applies also to Tepary Beans.

FIELD CROPS

When field seeds are desired by mail, add the required postage. See inside front cover page.

GROW HEMP, RAPE, SUNFLOWER AND CANARY SEED

The high price now prevailing will justify the planting of large acreage to these crops. With conditions that are likely to prevail in Europe beyond the time of planting next season's crop, it is sure the price of bird seed will greatly advance, thus making it certain that it would prove profitable to those who will plant large acreage to any of these crops. Each one of them is easily grown and easily harvested, but plant at least fifty acres, in order that you may have a carload of grain, or unite with your neighbors to grow a carload. All of these crops should be planted during January.

If interested, write us at once for particulars.

Mammoth Russian Sunflower.—Single heads measure 15 to 22 inches in diameter, and contain an immense amount of seed, which is highly valued by all farmers and poultry breeders who have tried it as an excellent and cheap food for fowls. It is the best egg-producing food known for poultry. It can be raised cheaper than corn, and is destined to be an article of great value. Every farmer should plant some of the seed in any waste piece of ground any time from early spring up to the middle of July. Three pounds of seed will plant one acre. Price—(1 lb. 20c) prepaid. Write for quantity price.

Canary.—This can be grown as successfully here as anywhere in the world. The only discouragement has been its great destruction by birds. Try an acre. It is profitable. Uer (lb. 20c prepaid) (10 lbs. 75c).

Rape.—Thousands of sacks of rape are imported each year, while it grows wild in some localities near Los Angeles. It is profitable and finds a ready market.

Price—(Per lb. 20c prepaid) (10 lbs. 75c).

Hemp for Fiber is now successfully grown in the San Joaquin Valley and is a profitable and easy crop to grow. Fifty dollars per acre in one hundred days is assured if not less than two hundred and fifty acres is planted in each locality.

Sow sixty pounds of seed per acre. Per (lb. 20c prepaid) (\$6.00 per 100 lbs).

Improved Evergreen Broom Corn.—This Broom Corn grows about eight to ten feet high, stands up well and is entirely free from crooked brush. The fibre is long and fine. Its great value is that it will not get red in the field before it is cut, but it is strictly a green variety of brush, commanding high price. It grows to perfection in all sections of Central and Southern California, back from the coast. Price—(Per lb. 15c) (10 lbs. \$1.00). Write for quantity price.

Dwarf Evergreen Broom Corn is more desirable than the Tall in a locality where a strong wind prevails. It is also less trouble to harvest, while the yield is nearly the same as the Tall Variety. Price—(Per lb. 15c) (10 lbs. \$1.00). Write for quantity price. Do not buy cheap seed; it has no pedigree.

Write for special circular on Broom Corn Culture. It is free.

TOBACCO

If interested, write for particulars.

Turkish Tobacco is now one of the staple crops of California. It is largely grown in the San Joaquin Valley, and marketed with satisfactory returns to the grower. A good crop can always be sold to dealers in San Francisco. Any soil that is good for potatoes will grow tobacco.

We are offering only two varieties that have proven entirely satisfactory to California growers.

Samson is the larger and coarser variety; **Kavala** the finer. Both are in demand, as each serves its various purposes in manufacturing.

Sow seed Feb. 1st broadcast in a seed bed. Do not rake or cover; only roll it or tamp it with a board. When five leaves show and are three or four inches high, it is ready to transplant. Transplant eighteen inches apart in rows three feet apart.

Price of seed (pkt. 10c) (1 oz. \$1.00). One ounce of seed is sufficient for two acres.

COTTON

Egyptian.—A tall long staple cotton, largely grown in the Imperial Valley, and is now one of the standard varieties. Our seed was grown in Imperial County from a thoroughly acclimated strain of Egyptian Cotton.

Price—Per (pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$2.00 postpaid).

American Long Staple Peeler.—This variety was recommended to Imperial growers by millmen of the Mississippi Delta. It has proven congenial to Imperial County and found to produce a cotton that sells at a special price because it can be used for larger bolt stock. The yield is from 1 to 1½ bales per acre.

Price—Per (pkt. 5c) (1 lb. 25c prepaid) (10 lbs. \$2.00 postpaid).

GRASS SEED FOR LAWNS



A Los Angeles Lawn

Hints on Lawn Making.—Lawn grass seed may be sown the year round in California. In making a new lawn the soil should be carefully cultivated to the depth of one foot, and prepared to the desired level, and well rolled, after which a light raking will prepare it for the seed. If the soil is poor it should be enriched with some good commercial fertilizer. Sow the seed carefully and even, using one pound to cover an area of 250 square feet; rake in well and roll. Water frequently with a very fine spray.

Fertilizing the Lawn.—To keep up the beauty of a lawn, it will be necessary to feed the grass well. You cannot expect it to retain that depth and richness of texture and color which characterizes it while young, after the elements of plant food have been exhausted.

Ask for Wizard Fertilizer. Price—(\$1.75 for 25 lbs.), which is sufficient for 1200 square feet of lawn. No odor, no dirt.

Fancy Kentucky Blue Grass.—The purest and best lawn seed. Produces a lasting and beautiful effect. We sell only the finest quality of this seed. (Per lb. 35c prepaid).

White Dutch Clover.—Makes a showy effect much quicker than the Blue Grass. In conjunction with Blue Grass, however, it forms the finest and closest turf. (Per lb. 65c prepaid).

Australian Rye Grass.—Used by some instead of Kentucky Blue Grass. It makes a very pretty lawn, but is coarser and not permanent. It must be renewed every three or four years. (Price—Per lb., by mail 25c).

Lippia Grass.—Similar in appearance to clover. Very hardy; rarely needs water. It trails close to the ground, seldom needs cutting, and is almost indestructible; particularly desirable for parks, terraces and lawns in the country where water is scarce, for it keeps green throughout the summer season with little water; propagated by transplanting. Sold in boxes. One box will be required to set about 300 square feet. (Per box \$1.00).

We give particular attention to the quality of our **Lawn Grass Seed**. Our Kentucky Blue Grass and our White Clover is always tested thoroughly before purchasing.

A WORD

The beautiful lawns of Los Angeles cannot be excelled anywhere in the world. In few places can a new home become so quickly surrounded with luxuriant vines, trees, shrubbery and flowers. This climate will accomplish more in one season than five seasons of Eastern climate. It is a pleasure to plant here, for there is something blooming all the year round. But it requires skill and intelligent aid to direct nature to produce a profusion of beautiful colors at all times.

FLOWER SEEDS

There are no more satisfactory flowers than those grown from seed, especially the easily grown and brilliant flowered annuals. The beautiful shrubs and lilies, of course, have their place, but are far more expensive than a paper of seed which will furnish a large number of plants with usually enough for one's garden and some to spare.

To help in finding the most suitable plants we have classified all of the flowers of which we offer seed into different lists. We hope these lists will be helpful to you. See calendar for planting flowers.

Tender or Greenhouse means the plant will not stand the least frost. All such must be planted late in spring (May) or in a greenhouse.

Half Hardy means the plant will stand any light frost, but needs protection against very cold weather. These should be planted in the spring (March and April), not in the fall.

Hardy means the plant will stand considerable frost, or practically all we have on the Pacific Coast. These may be planted in the fall or in the spring (October to May). If sown in the fall they will come into bloom earlier than if sown in spring, even if the plants do not make much progress during the cold weather.

Annuals are plants that bloom the first year from seed, and the plant dies after one season. Tender annuals must be sown in spring (April to June) and hardy annuals may be sown in either spring or fall (October to May).

Biennials are plants that bloom the second year from seed, and the plant dies after blooming. In California many of these will bloom the first year if sown early. Sow under same conditions as perennials.

Perennials are plants that bloom the second year from seed, and the plant lives and blooms during successive years. If sown in early spring (February to April 15) many perennials will bloom the first year from seed. Tender and half-hardy perennials are best sown in spring after frost is over (April 15 to June). Hardy perennials are best sown in the late summer and early fall (July to October) for next year's flowers.

LISTS OF FLOWER SEEDS FOR SPECIAL PURPOSES

PERENNIAL PLANTS

Antirrhinum, Aquilegia, Asters (hardy sorts), Bellis, Canna, Campanula, Carnations, Chrysanthemums (hardy sorts), Coreopsis, Delphinium, Dianthus, Digitalis, Gaillardia (hardy), Geranium, Gypsophila, Paniculata, Heliotrope, Hollyhocks, Lobelia (hardy sorts), Matricaria, Myosotis, Pansy, Phlox (hardy), Pinks (hardy), Poppy Iceland, Poppy Oriental, Primrose Pyrethrum, Sweet William, Verbena, Violet, Wallflower.

EDGING AND BORDER PLANTS

Abronia, Ageratum (dwarf), Alyssum Sweet, Bellis, Candytuft, Centaurea "Dusty Miller," Lobelia, Mignonette, Myosotis, Nasturtium (dwarf), Nemophila, Pansy, Portulaca, Snap Dragon (dwarf), Sweet William, Sweet Peas (dwarf), Violet.

PLANTS FOR BEDDING AND IN MASSES

Adonis, Agrostemma, Amaranthus, Antirrhinum, Asters, Bachelor's Button, Balsam, Cacalia, Calendula, Calliopsis, California Poppy, Campanula, Canna, Castor Beans, Carnation, Chrysanthemum, Clarkia, Cosmos, Coxcomb, Delphinium, Digitalis, Four O'Clock, Gaillardia, Geranium, Heliotrope, Lantana, Larkspur, Linum, Mignonette, Nicotiana, Nigella, Phlox, Petunia, Pinks, Poppy, Salpiglossis, Salvia, Scabiosa, Sunflower (fancy), Stocks, Sweet Sultan, Sweet William, Verbena, Wallflower, Zinnia.

CLIMBING PLANTS

Bignonia, Canary Bird Flower, Clematis, Cobaea, Cypress Vine, Gourds, Hop Japanese, Hyacinth Beans, Ipomoea, Ivy, Maurandia, Morning Glory, Nasturtium, Sweet Peas, Thunbergia, Wistaria.

PLANTS SUITABLE FOR POTS

Abutilon, Ageratum, Asparagus, Begonia, Calceolaria, Carnation, Cineraria, Coleus, Cyclamen, Daisy "Shasta," Daisy "Paris," Fuchsia, Geranium, Gloxinia, Heliotrope, Lantana, Mignonette, Mimosa, Mimulus, Petunia (double), Primrose, Smilax, Stocks, Violet.

See list of Books. Among them are several good works on flower and garden culture.

FLOWER SEED LIST

ABRONIA (Sand Verbena).

A hardy annual, trailing in habit, about nine inches high, bearing verbena-like clusters of flowers, which are very fragrant. A native of California. Thrives in dry situations, and is valuable for rock-work or hanging baskets.

Umbellata.—Rosy lilac. Pkt. 5c; oz. 50c.

ADONIS (Floss Adonis, or Pheasant's Eye).

A hardy annual of easy culture, growing about one foot high. Leaves fine-cut and feathery; flowers crimson. Seed should be sown in the autumn. Pkt. 5c.



Ageratum Little Dorrit

AGERATUM (Floss Flower).

A hardy annual of easy culture, especially valuable for bedding, as it is literally covered with blossoms all summer. Sow the seed early in the spring, either in boxes to transplant, or out of doors, and thin to four to six inches.

Blue Perfection.—Deep blue, one foot high. Pkt. 5c.

Mexicanum, Imperial Dwarf Blue.—Eight inches high, flowers blue. Pkt. 5c; oz. 40c.

Mexicanum, Imperial Dwarf White.—Eight inches high, flowers white. Pkt. 5c; $\frac{1}{2}$ oz. 30c.

Little Dorrit.—A perfect mass of blue flowers; plant is six inches high and a foot through. Pkt. 5c.

ALYSSUM (Maritimum).

A fragrant, hardy annual, having the odor of honey, and bearing spikes of small, white flowers in great profusion throughout the summer and autumn. Useful for borders or early bedding flowers. Sow the seed early in spring.

Common Sweet Alyssum.—One foot high, very sweet honey fragrance. (Pkt. 5c) (oz. 25).

Little Gem.—Three to four inches high; fine for borders. Pkt. 5c.

Saxatile.—A yellowish perennial variety. Pkt. 5c.

AGROSTEMA (Rose of Heaven).

A hardy perennial, blooming the first season if the seed is sown in the autumn. Plant grows one to two feet high; flowers resemble Dianthus, in bright colors, and are borne on long, slender stems. Mixed colors, pkt. 5c.

AMARANTHUS.

Hardy annuals, grown especially for their brilliant foliage.

Caudatus (Love Lies Bleeding).—Light yellowish-green foliage; long, drooping, crimson flower spikes. Plant three to four feet high. Pkt. 5c.

Tricolor (Joseph's Coat).—Plant three feet high, with brilliant leaves in variegated red, yellow, green, etc. Pkt. 5c.

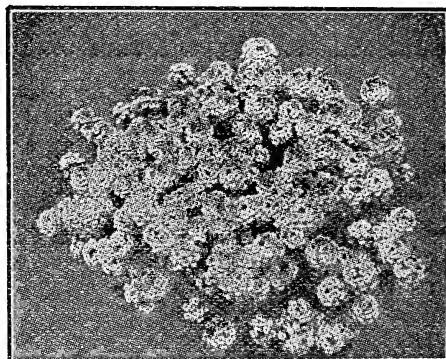
AMPELOPSIS, QUINQUEFOLIA. See Virginia Creeper.

ANGEL'S TRUMPET. See Datura.

ANTIRRHINUM (Snapdragon)

Antirrhinum thrive in almost any soil, and should receive more attention. It is undoubtedly one of the best cut flowers which can readily be grown from seed, while for bedding or borders they are unsurpassed.

Antirrhinum Double White.—Quite a new departure in the class of tall, large flowering snapdragons is here offered. Out of the mouth-like aperture in the flowers between the upper and lower lips, emerge abnormal fantastic petals which give a double and beard-like aspect to the very large bloom. Pkt. 15c.



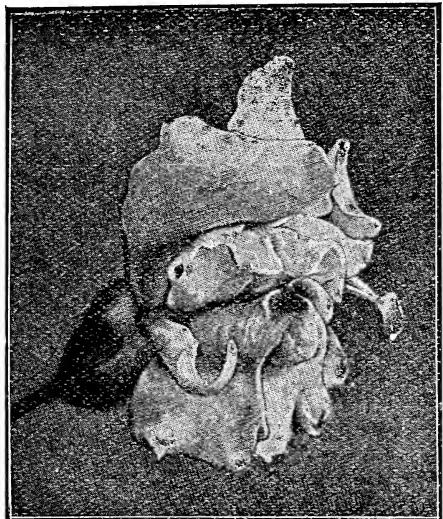
Alyssum Little Gem

Majus, Queen Victoria.—Striking variety, sending up numerous long spikes of pure white flowers. Excellent for cutting. Pkt. 10c.

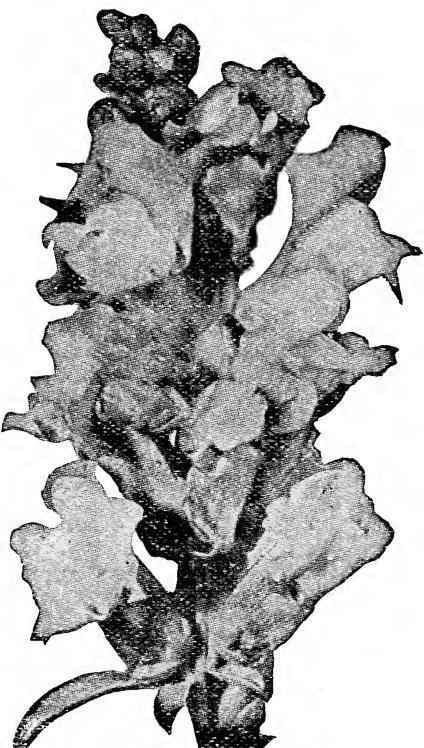
Majus, Fire King.—Tall. Resplendent coloring of rich yellow and scarlet crimson. Pkt. 10c.

Majus, Striatum.—Tall. Spikes of beautiful striped flowers. Pkt. 5c.

Majus, Album.—Tall. Flowers of large size, pure white. Pkt. 5c.

**Antirrhinum Double White**

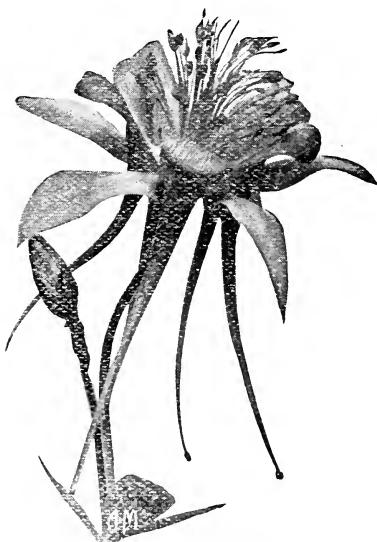
Majus, Grandiflora.—Tall. Mixed; including all the new colors. Pkt. 5c.

**Antirrhinum Queen of the North**

Nanum, Queen of the North.—Semi-dwarf. An extremely beautiful pure white variety, well adapted for small beds or borders. Pkt. 10c.

Nanum, Black Prince.—Semi-Dwarf variety. Extremely rich color, which makes a splendid contrast with the lighter varieties. Pkt. 10c.

Nanum, Tom Thumb.—Mixed. Pkt. 5c.

**Aquilegia Chrysanthia****AQUILEGIA**

A hardy perennial, growing about two feet high and bearing an immense variety of colors on long, smooth stems.

California Hybrida.—Large yellow flowers, orange spurs; an improvement on our native sort. Pkt. 5c.

Coerulea (Rocky Mountain Blue Columbine).—Fine deep blue and white; long spurs. Pkt. 10c.

Skinneri (Mexican Columbia).—Very handsome and quite distinct; spurs and sepals long, crimson and light green; 3 feet. Pkt. 5c.

White, Spurred.—Pure white with long spurs. Pkt. 10c.

Long Spurred Hybrids Mixed.—Showy. Pkt. 10c.

Single Mixed (A. Vulgaris).—Pkt. 5c.

Double Mixed (A. Vulgaris).—Pkt. 5c.

ARCTOTIC (African Daisy)

Grandis.—Large pearly white Marguerite-like flower, with delicate mauve center surrounded by a narrow golden band. The whole plant is covered with white down. Half hardy annual. Height, 2 feet. Pkt. 5c.



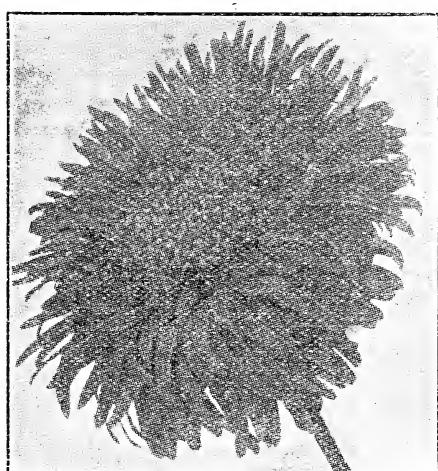
Arctotis (African Daisy)



Aster Ostrich Plume Pluto

ASTERS

A popular half-hardy annual produced in a great variety of classes and an almost endless number of colors. The tallest grow about two feet high, and some varieties of dwarfs are not over three inches high. The best method of culture is to sow the seed in boxes about January 1st, and transplant about April 1st to 15th. The seed can be sown, however, in the row where the plants are to remain, thinning them from six to twelve inches apart, according to variety.



Aster Hercules

Hercules Aster, Rosy Lilac.—The Hercules type, having long, curly petals, which droop and twist gracefully from the center, and are so dense and full as to resemble one of the finest chrysanthemums; five to six inches across. It needs, however, fine, rich soil to bring out its greatest beauty. Pkt. 25c.

Queen of the Market.—One of the earliest blooming varieties, blossoming frequently in July. Of spreading habit, 8 to 10 inches high. Blossoms medium sized, and the petals curve outward. Mixed. Pkt. 10c.

Ostrich Plume Pluto.—A splendid new strain, large massive flowers of the deepest blood red, excellent for cutting. Pkt. 15c.

Giant Comet.—Elegant flowers, resembling the finest Japanese Chrysanthemums. Unrivalled for table decorations. Height, 18 inches. Mixed. Pkt. 10c.

Triumph.—Excellent Paeony-flowered Aster, of Tom Thumb habit. Large incurved flowers of dark scarlet. Pkt. 10c.

Ostrich Plume.—Extremely graceful Aster, with large, loose feathery heads, unrivalled for table decoration, flowers double and semi-double. The branching habit makes this a conspicuous border plant. Height, 18 inches. Mixed. Pkt. 10c.

Truffants Paeony Flowered Perfection.—Large incurved flowers of the brightest colors. Height, 2 feet. Mixed. Pkt. 10c.

Victoria.—One of the finest classes for exhibition; flowers very large as the petals curve outward instead of folding in; the Victoria makes a splendid contrast to the Paeony flowered varieties. Height, 18 inches. Mixed. Pkt. 10c.

Globe Flowered.—Quilled flowers and branching habit. A showy class for mixed borders, large and free flowering. Height, 2 feet. Mixed. (Pkt. 10c) (1/2 oz. 50c).

German Quilled.—Fine variety of quilled flowers. Height, 2 feet. Pkt. 10c.

Giant Hohenzollern.—Excellent, robust class with enormous flowers of most refined shape, unsurpassed for cutting and exhibitions. Mixed. Pkt. 10c.

Dwarf Chrysanthemums.—Compact and free flowering, admirably adapted for edging. Height, 1 foot. Mixed. Pkt. 10c.

Snowball.—A splendid Aster of dwarf symmetrical habit, not more than 12 inches in height. The pure white double flowers are imbricated, of extraordinary size, and are indispensable for exhibitions. Pkt. 10c.



Aster Snowball

Giant Branching.—The tallest and best florist's variety, and we heartily recommend it as the very best type of Aster we have. The plant grows 18 inches high and about 18 inches in width, and the blossoms, which are large and full-petaled, are borne on long stems or branches. The most satisfactory type of all Asters, since it is not only a showy bedding flower, but owing to its long stems and large blossoms, is valuable for bouquets. Comes into flower late in the autumn. Best colors:

Carmine,	White,
Lavender,	Crimson,
Pink,	Light Blue,
Rose,	Purple.

(Pkt. 10c) (oz. \$1.50)



Asparagus Plumosus

ASPARAGUS PLUMOSUS

A tender perennial for green-house or potted plant use, with long, fine feathery foliage. The sprays, when cut, retain their freshness in water from three to four weeks. Seeds start slowly and should be soaked in water before sowing. (Pkt. 10c) (100 seeds 50c).

Sprengeri (Emerald Feather).—An early, easily grown, feathery-leaved variety, with drooping branches. The best variety for hanging baskets. (Pkt. 10c) (100 seeds 50c).

AUSTRALIAN PEA VINE (*Dolichos Lignosus*)

A rapid-growing evergreen climbing perennial, flowering freely in large clusters of rose flowers. For covering arbors, trellises, etc., they have no superior.

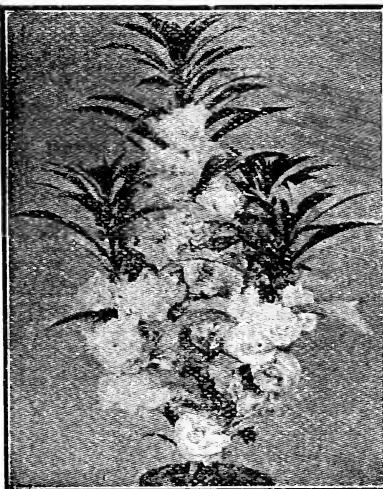
PINK, Pkt. 5c.

WHITE, Pkt. 5c.

BACHELOR'S BUTTON. See Centaurea.

BALLOON VINE, OR LOVE-IN-A-PUFF

Climbing annual, with small inferior flowers. The seed pods are curiously swelled or puffed, and are quite attractive. (Pkt. 5c) (oz. 25c).



Balsam

BALSAM OR LADY'S SLIPPER

A tender annual, with brittle stems and foliage. Grows about 12 inches high. Flowers both single and double, in bright colors and variations; are wax-like and very attractive. The individual blossoms floating in a dish of water exhibit their beauty to the best advantage.

Improved Camelia Flowered.—In its extraordinary size, perfect form and brilliant colors, this fine strain of balsams surpasses all others. Height, 18 inches. Finest mixed. Pkt. 5c.

Rose Flowered.—Handsome double flowers in form resembling a rose. Height, 18 inches, fine mixed. Pkt. 5c.

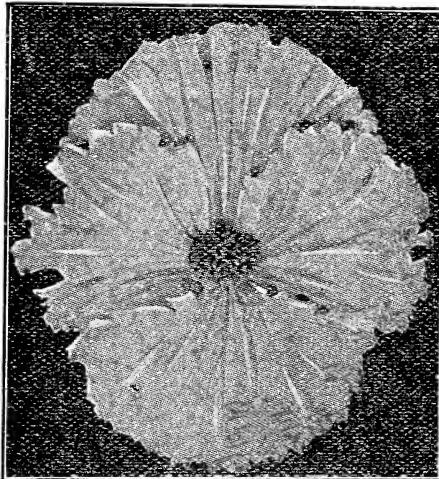
Spotted.—Large semi-double flowers well adapted for borders, fine mixed colors. Pkt. 5c.

BEAN (Scarlet Runner)

A popular climber; the seed is edible and much esteemed. Flowers scarlet; beans black and lake splashed. (Pkt. 5c) (½ lb. 15c) (1 lb. 25c).

BEGONIA

Tender perennial, usually grown in the green-house. Some varieties are especially attractive on account of their foliage, but most varieties have exquisitely beautiful wax-like flowers, both single and double. The seed is very small and rather difficult to germinate. It is also very expensive, some strains being worth far more than their weight in gold.



Begonia Gigantea Crispa

Begonia Hybrida Gigantea Crispa.—The flowers are of enormous size, varying in color from pure white to dark purple. The petals are curled wavelike, the bursting buds are folded and ruffled in such a peculiar fashion that they present the appearance of a large double flower. Pkt. 15c.

Fibrous-Rooted Varieties.—For outdoor culture, having beautiful leaves and bearing clusters of small, waxy flowers. Pkt. 25c.

BELLIS PERENNIS (Double Daisy)

A hardy perennial, blossoming freely all spring and summer. Plant is about four inches high and is valuable for borders. Is much sown in lawns.



Bellis (English Daisy)

Extra Double White, or Snowball.—A clear white variety. (Pkt. 10c) (1-8 oz. 75c).

Longfellow Double.—Mixed. (Pkt. 10c) (1-8 oz. 65c).

BIGNONIA (Trumpet Vine)

Magnificent, hardy perennial climber, with brilliant scarlet or yellow flowers; a most ornamental and effective covering for walls, houses, etc. 30 feet. Pkt. 10c.

BORDER PINKS—See *Dianthus Plumarius*.

CALENDULA (Pot Marigold)

Very hardy annual, one foot high, blooming freely practically the whole year round. Is of the easiest culture and is desirable for rather inferior soils, where less sturdy flowers do not thrive. A medicinal extract resembling arnica is made from the flowers.

Double Mixed.—A good mixture of 8 or 10 different shades of yellow, some clear colors and some shaded and striped. (Pkt. 5c) (oz. 15c).

Meteor.—Large double yellow flowers, striped with orange. Pkt. 5c.

Prince of Orange.—A fine deep orange. Pkt. 5c.

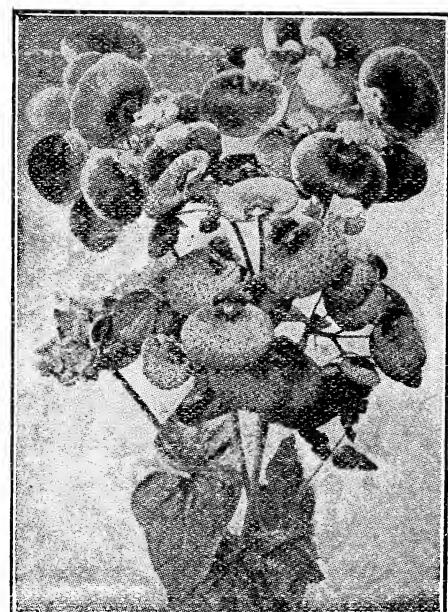
CALIFORNIA POPPY (See Eschscholtzia)**CANARY BIRD FLOWER (Tropaeolum Canaricense)**

A tender, climbing annual of the nasturtium family. Blossoms have curiously winged petals and are light yellow. (Pkt. 5c) (oz. 40c).

CANNA

Mixture of the popular varieties. Red and yellow flowers. Plants have large ornamental leaves. Pkt. 5c.

Crozy's Varieties.—Mixed. New large-flowered and free-blooming sorts. Pkt. 10c.

CALLIOPSIS (See Coreopsis)

Calceolaris

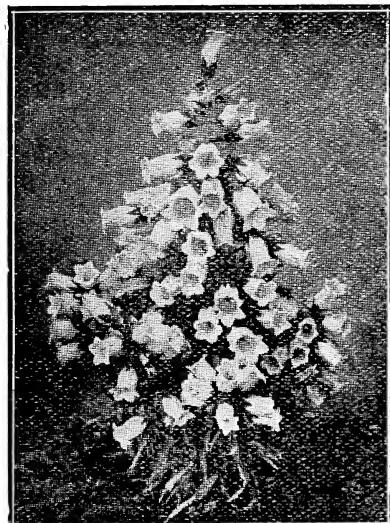
CALCEOLARIA

A tender perennial, used largely in greenhouses and conservatories. Bears a large profusion of small, pocket shaped flowers, many of which are beautifully tigereed or spotted. There is a great variety of shades and colors in various markings.

Grandiflora.—Large-flowered, self-colored, profuse flowers. Pkt. 25c.

CANTERBURY BELLS (Campanula Medium)

A hardy perennial, blooming the second year from seed, or the first, if sown early. Grows about three feet high.



Campanula

Persicifolia Grandiflora Hybrids.—Including pure white and various pleasing shades of mauve, blue, purple and some elegant, semi-double flowers, height 2 ft. Pkt. 10c.

Calycanthema.—Improved mixed, a combination of the finest and most delicate colors in cultivation, including single, double and cup and saucer varieties, height 2 ft. Pkt. 5c.

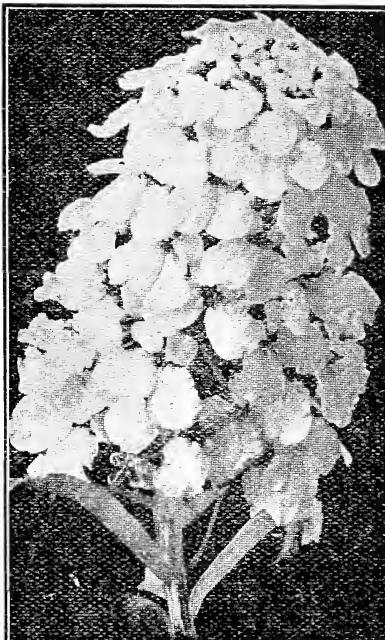
Medium.—Choice selection of pleasing colors single mixed. Pkt. 5e.

CASTOR OIL BEAN (See Ricinus)**CANDYTUFT (Iberis)**

A hardy annual, growing about 6 to 18 inches high, according to the variety. The blossoms are borne on variously long spikes, and the newer varieties are quite large flowering and very fragrant. Of easy culture and valuable for bedding or massing.

Umbrellata Purpurea.—Exceedingly showy and effective variety, bearing large spikes of dark crimson flowers. Pkt. 5c.

Amara.—Large, pure white flowers. Pkt. 5c.



Candytuft Empress

Coronaria Empress.—Large trusses of pure white flowers, the finest candytuft yet raised. Pkt. 5c.

Umbrellata Hybrida.—Mixed, including the best large flowering varieties. Pkt. 5c.

Umbrellata Carmine.—Large carmine colored flowers. Pkt. 5c.

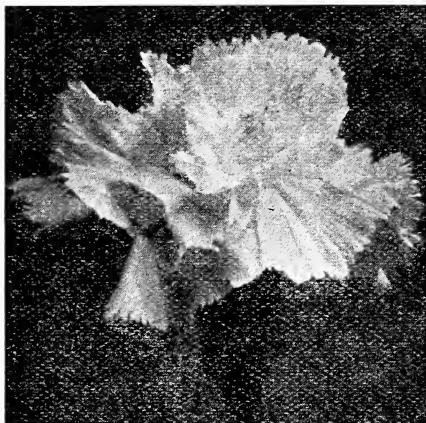
Our flower seeds are of the best quality that money and experience can produce.

Carnation

Our strain of these popular flowers is unsurpassable in beauty and variety of coloring, also in their delightful fragrance. For largest, richest flowers, we recommend their culture in pots of rich soil or small, shallow boxes. Cover the seed lightly, and shade from the strong rays of the sun. When the young plants are two or three inches high, they may be transplanted out into small beds. Shade and water them until established. Then they can be planted out in well-prepared beds, 12 to 18 inches apart. While the weather is cool, the ground should be mulched about 2 inches deep with well-rotted manure. This will not only help to retain the moisture in the ground, but also supply nutrient to the plants. The seed may be sown any time between March and September.

Grenadin Scarlet.—A valuable early flowering variety coming quite true to color and producing an exceptionally large percentage of sweet scented double scarlet flowers of a most telling color. Pkt. 10c.

Germania.—An excellent companion to the preceding and producing very large double flowers of a deep rich canary yellow. Pkt. 15c.



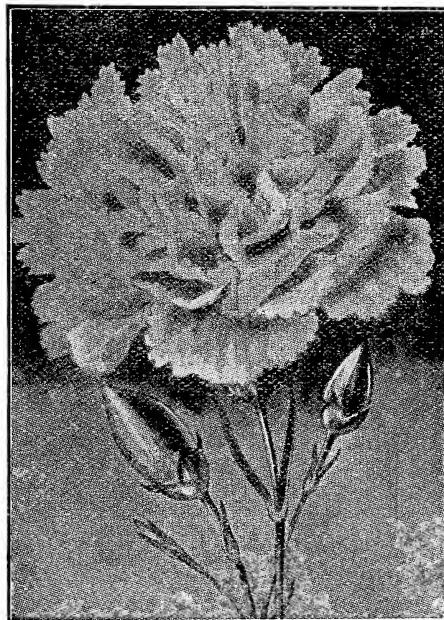
CARNATION (Marguerite Pure White)

Marguerite Pure White.—An exquisite sweet scented fringed flower of pure white color. Invaluable for bedding or indoor decoration. **Pkt. 10c.**

Marguerite Mixed Colors.—Very varied; gives a large percentage of fine double flowers. **(Pkt. 10c) (1-8 oz. 20c).**

Early Flowered Vienna Dwarf.—Extra early flowered strain of compact habit. Invaluable for bedding on account of the extremely free blooming habit of the plants. Colors varied and flowers mostly double. **Pkt. 10c.**

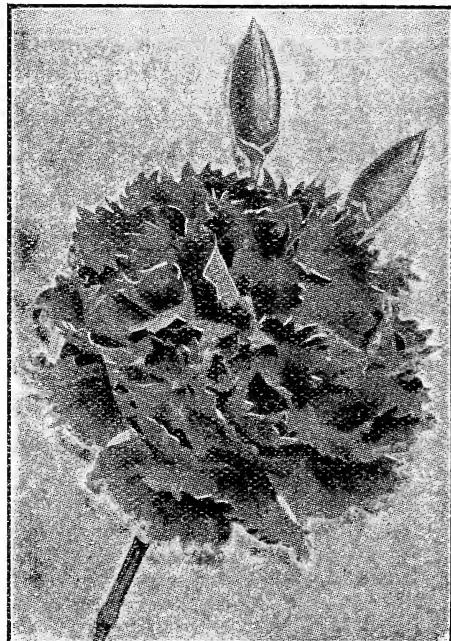
Double Mixed.—Of great value for borders and masses, producing a large percentage of double and semi-double flowers. **Pkt. 10c.**



Carnation Duchess of Saxony Coburg Gotha

CARNATION DUCHESS OF SAXONY CO-BURG GOTHA

Giant flowering carnation of a pure white color, freely produced and each bloom standing on a firm, long, erect flower stem. The great merit of this new variety is that it produces its exquisitely scented flowers within six months from date of sowing, saving all the trouble of wintering the plants. **Pkt. 20c.**



Carnation Chabaud Earliest French

Chabaud Earliest French.—From the ease with which this fine carnation can be flowered as an annual it has attained a popular position, and will continue to hold a foremost place in the garden. The beautiful fringed double flowers make a brilliant display of attractive coloring in the open and are greatly prized in borders and for table decoration. **Mixed colors. Pkt. 15c.**

CELOSIA (Cockscomb)

Very ornamental and strong plants, producing magnificent spikes of feathery looking flowers. They succeed well in the garden and make very attractive pot plants.

Pyramidalis Plumosa.—Handsome pyramidal form bearing long feathery plumes in brilliant colors. **Mixed. Pkt. 5c.**

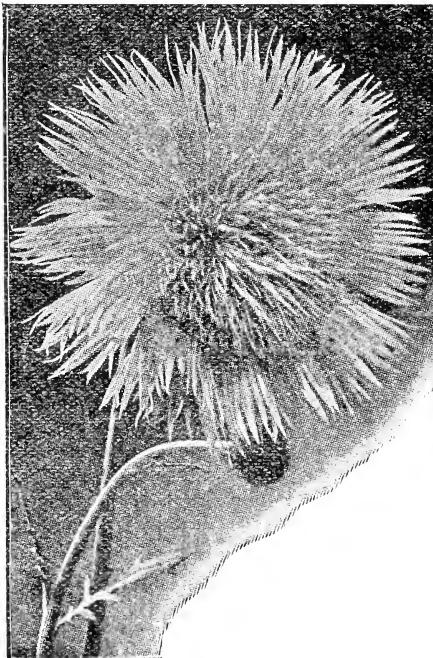
Thompsoni Magnifica.—A very fine selection of the popular feathered Celosia containing many pleasing shades of color carrying from pale yellow to the deepest crimson. **Pkt. 10c.**

Empress.—A handsome strain, large and compact heads; color splendid crimson. **Pkt. 10c.**

To have large flowers and luxuriant foliage, fertilize with DOMOTO PLANT FOOD. Directions with every package. Price—Per 2 lb. pkg. 25c.



Celosia Pyramidalis



Centaurea Imperialis

Glasgow Prize.—A greatly improved strain with immense heads borne on sturdy robust plants of dwarf habit. The color is a rich crimson, excellent for borders. Pkt. 10c.

CENTAUREA

A hardy annual, embracing a number of species, some being grown only for their foliage. All varieties grow from $1\frac{1}{2}$ to 2 feet high. Sow the seed early and transplant in March. Excepting the white-leaved sorts all make excellent cut flowers.

Imperialis.—A magnificent large flowered type exquisitely fringed and delightfully scented. The flowers are at least twice the size of the older varieties and retain their freshness in water a long period and are well adapted for cutting. Height 3 feet.

Imperialis Pure White.—Pkt. 10c.

Imperialis Yellow.—Pkt. 10c.

Imperialis Lavender.—Pkt. 10c.

Imperialis Mixed.—Pkt. 10c.

Odorata Marguerite.—Deservedly popular, pure white flowers of the Imperialis class. Pkt. 5c.

Odorata Light Blue.—Shows sweet-scented flowers of clear mauve color. Pkt. 5c.

Odorata Mixed.—Including white and various shades of yellow, mauve, blue and purple. Pkt. 5c.

Moschata or Sweet Sultan.—A well known type in white, yellow, lavender and purple blossoms.

Moschata Alba.—Flowers pure white and very fragrant. Pkt. 5c.

Fine Mixed.—A combination of various colors. Pkt. 5c.

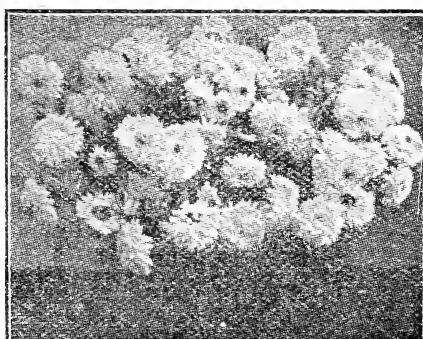
Suavealena.—Bright yellow flowers. Pkt. 5c.

Cyanus Emperor William.—The rich, deep blue Bachelor's Button. Pkt. 5c.

Candidissima or Dusty Miller.—Broad silvery-white foliage useful for bedding. Height 1 foot. Pkt. 10c.

CHRYSANTHEMUM

There are many widely different classes of this flower represented in the hardy annual or garden varieties, both single and double, and the perennial varieties, chief of which is the double or florists' varieties, highly prized in the autumn and winter.



Chrysanthemum (Bridal Robe)

Bridal Robe.—Of very compact and upright habit and not exceeding 10 inches in height, double pure white flowers. With their short closely-set petals the flowers recall the finest forms of very large flowering double Daisies. Pkt. 25c.

Coronarium Compactum Fl. Pl. White Pearl.—A vigorous-growing class of a branching habit, bearing large, pure, white, double flowers, invaluable for cutting as they retain their freshness for a long period in water. Pkt. 25c.

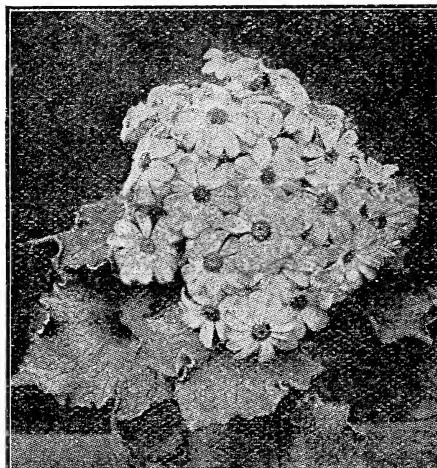
Carinatum.—Single mixed, comprising a wide range of attractive colors. Pkt. 5c.

Carinatum Hybridum. Dwarf double mixed, produce a diversity of colors, including many new and attractive shades. Pkt. 10c.

CINERARIA

A tender perennial, grown principally in the greenhouse, but can be grown in the garden in summer. Seed should be sown in summer, and the greenhouse requires only moderate heat. Plants grow from 1 to 2 feet high and bear clusters of large, single flowers of bright colors. Will do well in a partly shaded location.

Cineraria Hybrida Grandiflora.—The mixture includes every conceivable shade of pink, carmine, crimson and blue, varying to violet, as well as pure white, and blue and white. The flowers are of immense size. Pkt. 35c.

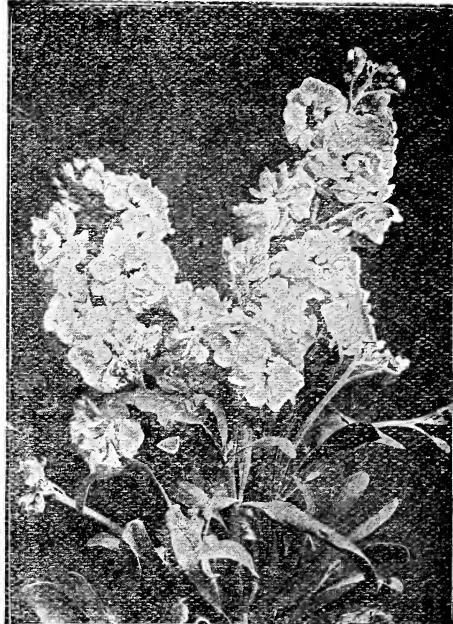


Cineraria Grandiflora

Hybrida.—Choice mixed; splendid strain of compact growth, bearing large exquisitely colored flowers. Pkt. 25c.

CLARKIA

A hardy annual of easy culture, growing about 18 inches high and bearing bright rose, white, or purple flowers in great profusion. Native of California. Seed sown in the fall will give early blossoms in the spring. Seed can be sown almost any time. Double Mixed, pkt. 5c. Single Mixed, pkt. 5c.



Clarkia

CLEMATIS

A popular hardy perennial climber. An old favorite and justly so, for there are few garden climbers that give more satisfaction. Large Flowered Mixed, pkt. 10c.

Paniculata.—A very fine hardy climber; leaves bright and glossy green; flowers small and hawthorn scented, and just covering the plant when in bloom. Excellent for covering trellises, cemeteries or fences. Pkt. 10c.

CLIANTHUS DIAMPIERI (Glory Pea of Australia)

One of the most gorgeous flowers in existence; the flowers are pea-shaped, of a brilliant scarlet color with intense black center; requires a dry, warm soil and little water; 2 ft. high. Soak seeds in hot water before sowing. Pkt. 15c.

COBEA SCANDENS (Cup and Saucer Vines)

A climber of rapid growth; very valuable for covering trellises, arbor, trunks of trees, etc. Will cling to any rough surface, often attaining a height of 30 to 40 feet in one season.

Scandens Purpurea.—Large bell-shaped purple flowers. Pkt. 10c.

Scandens Alba.—Pure white. Pkt. 10c.

COIX LACHRYMAE ("Job's Tears")

Curious ornamental grass with broad, corn-like leaves and seeds of a light slate color. Valuable for winter bouquets with everlasting flowers. Strings of handsome beads are made from the seeds. Hardy annual; three feet high. (Pkt. 5c) (oz. 15c).

COLEUS

These beautiful and ornamental foliage plants, producing the most attractive colors are a most interesting subject to grow from seed. To watch the foliage change into a variety of colors as it grows day by day, is wonderful. Pkt. 15c.



Coleus

COLLINSIA

A free-flowering and easily grown annual, growing from 1 to 2 feet; flowers white, crimson, purple, etc. A California wildflower. **Mixed, Pkt. 5c.**

Convolvulus.—See Morning Glory.

COREOPSIS

Also known as *Calliopsis*, will grow luxuriantly in any situation and are most useful, affording a constant supply of richly marked flowers for cutting. All varieties are annuals with the exception of *C-Grandiflora*.

Lanceolata Grandiflora.—Produces a profuse and long-continued succession of large, bold, golden yellow flowers during the whole summer months. Seed sown in March will flower the same season. Height 2½ feet. **Pkt. 10c.**

Tintoria.—Showy, yellow and brown flowers, height 2½ to 3 feet. **Pkt. 5c.**

Drummondii.—Large, rich, golden yellow flowers with chestnut-brown centers produced in abundance. Height 18 inches. **Pkt. 5c.**

Mixed.—A selection of the brightest and richest colored large-flowered varieties. **Pkt. 5c.**

Calliopsis Radiata Tiger Star.—A rich and continuously blooming annual with pretty, peculiar flowers. The leaflets of each flower are twisted like those of the well known Cactus Dahlia. Toward the center they show a vivid reddish brown coloration, the outer part being brilliant golden yellow tinged. The plants reach a height of about 8 inches and form round compact bushes which are throughout the summer literally covered with pretty flowers. **Pkt. 10c.**

COSMOS

A tender annual, with fine-cut, feathery foliage and large, showy blossoms. The late-flowering or giant type grows 5 to 6 feet high and its blossoms are larger than the early varieties. They bloom late in the fall, or about November 1st.

LATE OR GIANT

White—(Pkt. 5c) (oz. 50c).

Pink—(Pkt. 5c) (oz. 50c).

Crimson—(Pkt. 5c) (oz. 50c).

Mixed Colors—(Pkt. 5c) (oz. 35c).

Cosmos—New Gigantic Orchid Flowering

Lady Lennox.—Size, 6 to 7 inches in diameter, with wide overlapping petals of an exquisite shade of shell pink. The flowers are on long stems, making them exceptionally desirable for cutting. Height 5 to 7 feet. **Pkt. 10c.**

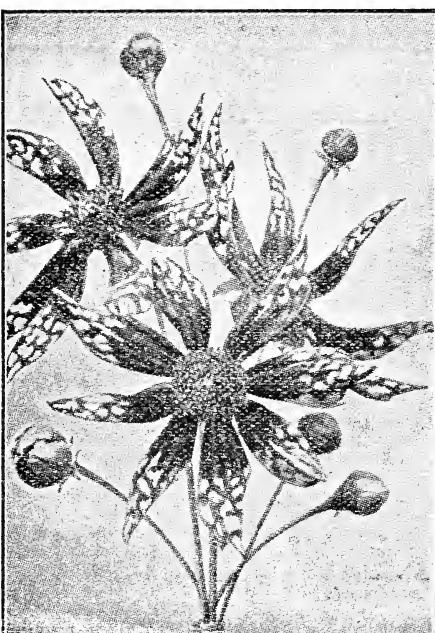
COCKSCOMB (See Celosia Cristata)**CYCLAMEN**

A tender, bulbous perennial, used in greenhouses and window gardens. It is easily grown from seed. Sow in the fall or early spring.

Persicium Giganteum.—Flowers of extraordinary size. The leaves are proportionately large, marked with silver-grey. Extra choice mixed. **Pkt. 20c.**

Papilio, Butterfly.—Fringed flowers in all possible colors, as white with rose, rose with scarlet, crimson with violet, etc. **Pkt. 25c.**

Persicium.—Not so large as the Giants, but easier to grow. Choice mixed colors. **Pkt. 10c.**



Calliopsis Tiger Star

**Cyclamen Victoria**

Cyclamen Victoria.—A truly magnificent strain of Cyclamen, vigorous habit and floriferousness and elegant appearance. The lovely margins of the upper part of the fringed flowers displaying the softest and richest colors lends to a flowering plant a most enchanting appearance. In all possible colors—as white with rose, rose with scarlet, crimson with violet, etc., and the coloration of the margin always corresponds with that of the base of the flower. Pkt. 20c.

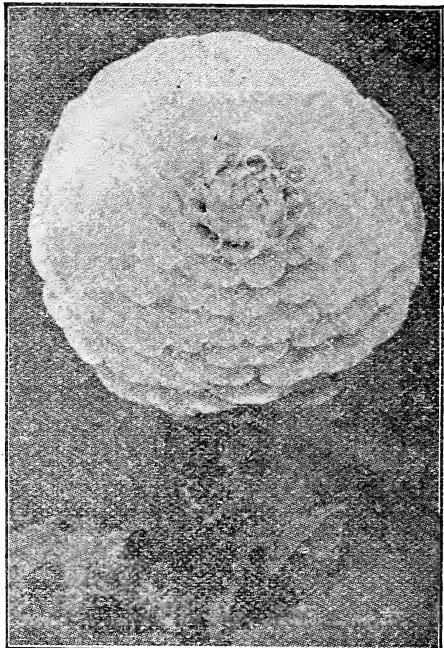
CYPRESS VINE (Ipomea Quamoclit)

A tender climbing annual with soft fern-like foliage and small star-like flowers. Choice mixed colors. Pkt. 5c (oz. 20c).

DAHLIA

A popular summer and autumn blooming plant; is grown from seed or propagate from the bulbous roots. Sow seed early in hot-beds and transplant as soon as danger of frost is past.

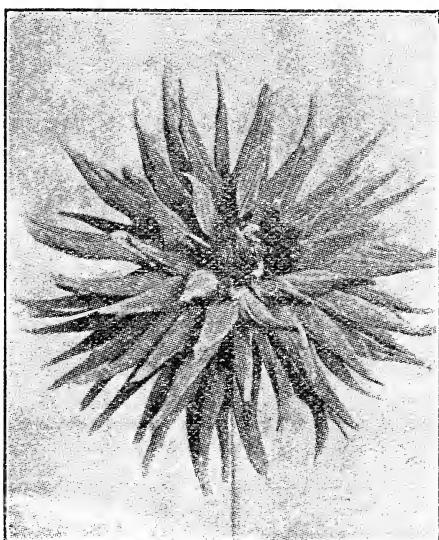
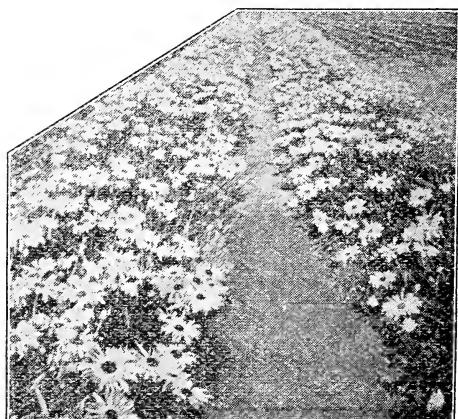
Cactus.—Mixed, double, with pointed petals. Pkt. 10c.

**Dahlia Double**

Double.—Choice mixed colors in great variety and flowers of excellent form. Pkt. 5c.

Single Mixed.—Seed saved from the choicest varieties. Pkt. 5c.

Lucifer.—Early and extremely free-flowering strain of dwarf habit, with flowers of a rich dark red color, showing to great effect above the dark foliage. Makes a most attractive bed. Pkt. 10c.

**Dahlia Cactus****Shasta Daisy**

DAISY, SHASTA DAISY

A fine perennial plant bearing large white single blossoms, with yellow centers. Soak seed in warm water over night before sowing. Pkt. 10c.

DAISY, DOUBLE (See Bellis)**DATURA (Trumpet Flower)**

Tender annual, growing about 3 feet high, flowers large and trumpet shaped.

Fasduosa Huberiana.—Choice mixed colors. Pkt. 5c.

DELPHINUM (See Larkspur)**DIANTHUS, OR PINKS**

Hardy annuals, about 1 foot high, and bearing beautifully colored single and double blossoms in profusion all summer. Sow seed early in boxes and transplant, or sow in rows where the plants are to remain, and thin.



Dianthus Mourning Cloak

Mourning Cloak.—Large double flowers almost black in color, beautifully edged with white. Pkt. 5c.

Fireball.—Vivid scarlet flowers. Pkt. 5c.

Snow Drift.—Large, pure white double flowers beautifully fringed. Pkt. 5c.

Eastern Queen.—Rose pink shade. Pkt. 5c.

Crimson Belle.—Velvety dark red. Pkt. 5c.

Lacinatus.—Single mixed. Pkt. 5c.

Hedewigii.—Single mixed, fringed flowers. Pkt. 5c.

Count Kerchove.—Fine variety of large fringed flowers of beautiful color. Pkt. 15c.

Lacinatus.—Double mixed. Pkt. 5c.

Mixture of Double and Single Pinks.—This mixture contains the best of the Dianthus varieties. Pkt. 5c.

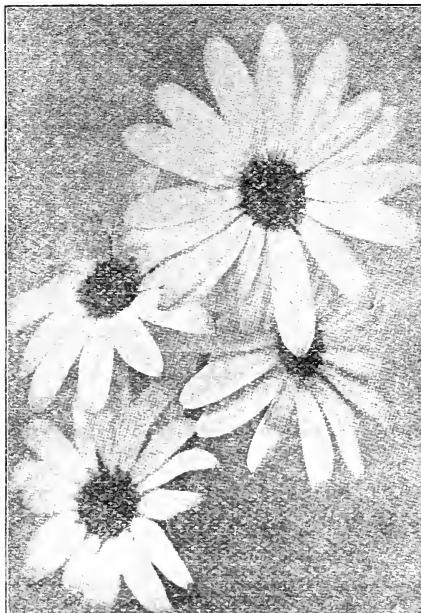
Plumarius (Grass Pink).—Very hardy producing large fragrant double, semi-double and single flowers of varied colors. Pkt. 5c.

Hedewigii.—Double mixed, fringed. Pkt. 5c.

Chinensis Double.—Choice mixed. Largest double flowers of beautiful colors. Pkt. 5c.

DIGITALIS, OR FOXGLOVE

A hardy perennial, blooming the second year from seed. Grows usually about 3½ feet, although in very rich soil sometimes 6 feet. The bell shaped flowers are borne on long spikes, and come in shades of purple, lavender, rose and white, all spotted lightly inside the blossom. Thrive best in cool, shady locations. Fine mixed, pkt. 5c.

**BIMORPHOTHECA AURANTIACA**

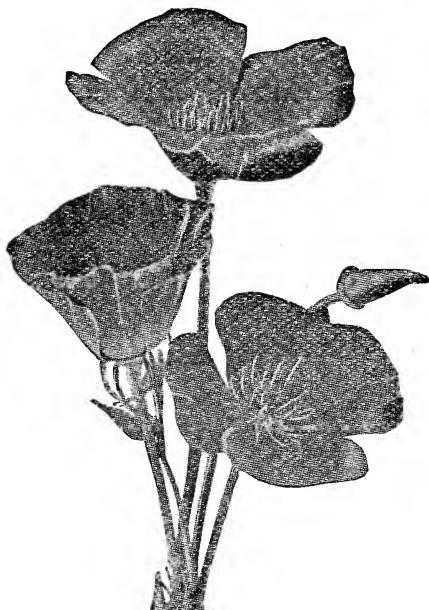
The Golden Marguerite. A rare and extremely showy annual from South Africa which has become a great favorite on account of its very easy culture and beautifully colored flowers. Its Marguerite-like blossoms, produced in great profusion, are 2½ to 2¾ in. in diameter. These are a unique glossy rich orange gold, which brilliant coloring is rendered more conspicuous by the dark disk surrounding the black zone. Pkt. 10c.

DOLICHOS, OR HYACINTH BEAN

Tender, climbing annual. Grows rapidly and is valuable for covering a trellis. Flowers in purple or white; are borne on long stems, the individual blossoms resembling the bean flower, and the ornamental pods resemble bean pods. Sow in open ground late in April. Lablab.—Mixed. Pkt. 10c.

DUSTY MILLER (See Centaurea)**ESCHSCHOLTZIA OR CALIFORNIA POPPY**

A hardy annual, with fine-cut feathery foliage and beautiful velvety cup-shaped flowers. Grows from 1 to 1½ feet high and blooms profusely. Seed may be sown in the fall and any time thereafter till April, and blossoms may be had from early in January till late in summer. The beautiful State flower of California.



Eschscholtzia

Californicus.—The bright, orange-yellow common variety. (Pkt. 5c.) (oz. 20e) (lb. \$2.25).

Burbank's Crimson Flowering.—Pkt. 10c.

Crocea.—Pure deep orange. (Pkt. 5c) (oz. 25e).

Mandarin.—Blossoms are copper-colored outside and bright yellow inside the petals. (Pkt. 5c) (oz. 25e).

Rose Cardinal.—White inside, light pink outside. (Pkt. 5c) (oz. 40e).

Mixture of all varieties.—(Pkt. 5c) (oz. 20e) (lb. \$2.25).

BUSH ESCHSCHOLTZIA (See Hunnemannia)

EVERLASTING FLOWER (See Helichrysum)

EVENING PRIMROSE (See Oenothera)

EVERLASTING PEA (See Lathyrus Latifolius)

FLAX (See Linum)

FEVERFEW (Matricaria Capensis)

Called Double Feverfew. A plant growing 18 inches high and bearing profusely pure white, very double flowers. Pkt. 5c. See also Pyrethrum for edging varieties.

FLOWERING SAGE (See Salvia)

FOUR O'CLOCK (Mirabilis)

A hardy annual of easy culture, growing about 2 feet high. The plant is free flowering, bearing blooms of a great variety of colors and spikes.

Jalapa Marvel of Peru.—Mixed. (Pkt. 5c) (oz. 20e).

FOXGLOVE (See Digitalis)

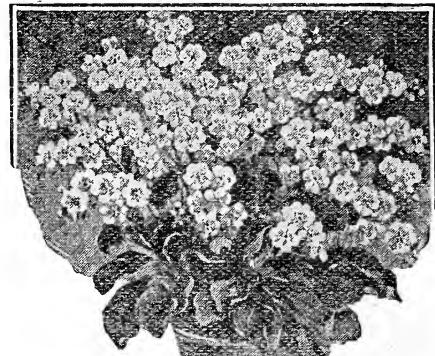
FUCHSIA (Lady's Eardrop)

A well known plant of easy culture in pots for the conservatory, parlor decoration or the open ground. Start seed early under glass.

Double Mixed.—Pkt. 25c.

FORGET-ME-NOT (Myosotis)

A hardy perennial, growing 6 to 12 inches high. Small star-like flowers are borne in clusters on long stems; blooms the first year if seed is sown early. Thrives best in a cool, moist location.



Forget-Me-Not

Alpestris.—Blue. Pkt. 5c.

Victoria.—Large flowers; bright azure blue with yellow center; plant symmetrical, dwarf and strong grower. Pkt. 10c.

GAILLARDIA

Beautiful show plant, remarkable for the profusion, size and brilliancy of its flowers continuing in bloom from early summer till late in the fall. Excellent for beds, borders, or for cutting. Should be sown where they are to bloom, height 18 inches. Pkt. 5c.



Gaillardia Grandiflora

Grandiflora.—Single perennial variety of varying shades of reddish brown and yellow. Pkt. 5c.

Pieta Lorenziana Double Mixed.—Large heads of bright yellow and red flowers. Very double, with quilled petals, suitable for bouquets. Pkt. 5c.

Pieta.—Favorite bedding plant, producing throughout the summer numerous yellow and scarlet flowers. Pkt. 5c.

GERANIUM

Geranium cuttings, see page 15.

A half-hardy perennial, flowering the first year from seed if sown early. A gorgeous flower of numerous shades of color bearing continuously renders this one of the most popular plants grown.



Geranium

Large Flowers of Fancy Show.—This choice mixture includes many of the newest and finest sorts. Pkt. 25c.

Zonale.—Mixed single. Pkt. 10c.

GILIA

A hardy annual growing one foot high, with white, lilac or rose-colored flowers. A native of California. For rock work or borders. Sow seed in the fall. Mixed. (Pkt. 5c) (oz. 20c).

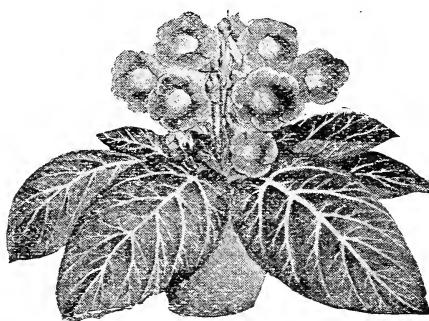
GILLIFLOWER (See Ten Weeks' Stocks)

GLADIOLUS

Well known magnificent plants, with sword-like leaves and long spikes of flowers of every conceivable color and shade. Many new and rare varieties are produced from seed. Pkt. 15c.

GLOXINIA

Beautiful hot-house plants, with large, bell-shaped blossoms, which come in rich, velvety-deep, and bright colors, some of which are beautifully marked. Sow in the fall or early spring.



Gloxinia Ornamental Foliage

Ornamental Foliage.—A new Hybrid foliage. The leaves are very large and vary from velvety brown to glossy purple. The enormous flowers, which appear in great profusion, are bright, rosy-carmine, with spotted white throats. Pkt. 25c.

Hybridia Grandiflora.—Enormous flowers. Pkt. 25c.

GODETIA

A hardy annual, ten inches high, of compact growth, satiny cup-shaped flowers in deep red, pink and white, shaded and blended. Valuable for bedding. Sow seed early in the year; grows wild in California.



Godetia Whitneyi

Whitneyi.—Highly effective variety with brilliant carmine flowers. Very freely produced on compact plants, height 1 foot. Pkt. 5c.

Whitneyi Fulgida.—An extremely showy variety, flowers of a brilliant crimson-scarlet, with white center. Very striking and effective. Pkt. 5c.

Semi-Dwarf Mixed.—Including all the finest varieties. Pkt. 5c.

Lady Albemarle.—A splendid variety. Flowers large and of intense glowing carmine-crimson, slightly edged with lilac. Height 1 foot. Pkt. 5c.

Lady Satin Rose.—Bright, rose-colored flowers having glossy satin-like petals. Height 6 inches. Pkt. 5c.

Duchess of Albany.—Beautiful glossy, satin-white flowers produced in great abundance. Height 1 foot. Pkt. 5c.

The Bride.—Lovely white flowers suffused with rose, height 1 foot. Pkt. 5c.

GOURDS

Some varieties, besides being odd, are very ornamental.

Mixed Ornamental Varieties.—(Pkt. 5c) (oz. 25c).

Chinese Bottle.—A useful variety. Pkt. 5c.

Dish Cloth, or Luffa.—The inside lining resembles a sponge; very useful. Pkt. 5c.

Dipper or Siphon.—Can readily be made into a dipper. Pkt. 5c.

Nest Egg.—These resemble a hen's egg and are frequently used for nest eggs. Pkt. 5c.

Sugar Trough.—Useful for baskets or buckets, holding from two to ten gallons each. Pkt. 5c.

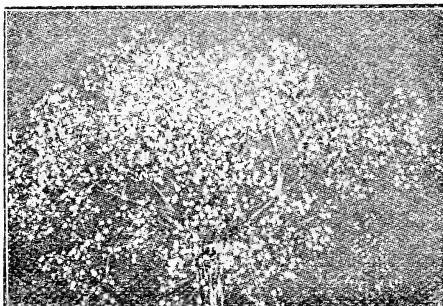
Turk's Turban.—Red, green, striped, etc., ornamental. Pkt. 5c.

Calabash-shaped.—Height 10 ft. Pkt. 10c.

GOLDEN-GLOW (See Rudbeckia)

GYPSOPHILA (Baby's Breath)

A hardy annual of easy culture. Grows two to three feet high, and bears a profusion of small star-shaped white and pink flowers.



Gypsophila

Paniculata.—Fine for bouquets; white-flowers; perennial. (Pkt. 5c) (oz. 40c).

Elegans.—Annual white. Very largely grown by florists for use in bouquets. (Pkt. 5c) (oz. 35c).

HELIANTHUS (See Sunflower)

HELICHRYSUM (Everlasting Flower)

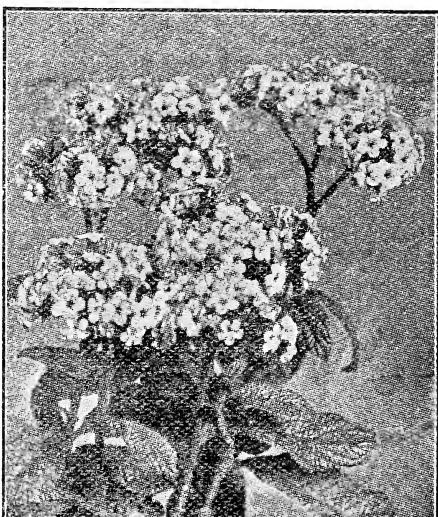
A free-flowering, hardy annual, growing four to five feet high and bearing beautiful straw-like flowers in a great variety of shades and colors. Makes a very handsome dried bouquet. Mixed. Pkt. 5c.



Helichrysum

HELIOTROPE

A half-hardy perennial, growing four to eight feet high. Small flowers, borne in graceful clusters and very fragrant. Blooms the first season from seed if sown early. Forms a large plant and requires a roomy situation.



Heliotrope Louise Delaux

Louise Delaux.—Flowers rose tinted. Pkt. 10c.

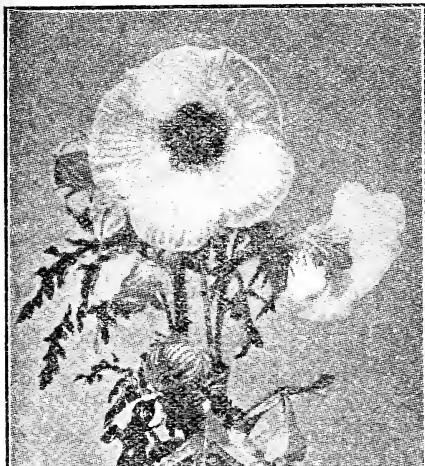
Queen Marguerite.—Purple blue. Pkt. 10c.

White Lady.—Pure white. Pkt. 10c.

Finest Mixed.—A mixture of the ordinary true types. Pkt. 10c.

HIBISCUS

A hardy annual, growing about 2 feet high, showing an ornamental class of plants with large, beautiful colored flowers; grows freely in common garden soil.



Hibiscus

HIBISCUS—Africanus.—A showy, hardy annual, cream color with rich brown center. Height 2 feet. Pkt. 5c.

HOLLYHOCK

A hardy perennial of upright, stately growth, five to eight feet high. The very double varieties are the most desirable, but the newer, semi-double, fringed types are also very popular.



Hollyhock

Chater's Superb Mixed.—Saved from a magnificent collection of fine named double varieties. Pkt. 10c.

Allegheny.—This unique and beautiful variety produces semi-double flowers about 3 inches across. The petals are crinkled and fringed like crumpled and slashed satin. Pkt. 10c.

New Annual Mixed.—Saved from the best trial varieties. Pkt. 10c.

HUMULUS, OR JAPANESE HOP

A rapid-growing, hardy climbing annual with dense leaves. Will grow 20 to 30 feet in a season.

Japonicus.—Bright green foliage. Pkt. 10c.

Japonicus Variegatus.—Bright, variegated yellow, white and green leaves. Pkt. 10c.

HUNNEMANNIA, OR BUSH ESCHSCHOLTZIA

Known also as the Santa Barbara Poppy. An erect-growing, tender perennial, about two feet high. Foliage fine-cut, feathery blossoms, beautifully cup-shaped, bright yellow, and about three to four inches across. Stems, long and smooth. Pkt. 5c.

HYACINTH BEAN (See Dolichos)**IMPOMOPSIS**

Specially decorative, half hardy annual with brightly colored flowers and feathery foliage. Height 3 feet.

Elegans Choice Mixed.—Pkt. 5c.

IPOMOEA

An extensive genus, including many well known garden flowers. Are tender climbing annuals, from 5 to 30 feet long. The seed of several varieties, especially the moon flower, should have the outer shell punctured and then soaked in water for twelve hours or more to germinate it.

Coccinea.—Brilliant scarlet flowers, with small foliage. Pkt. 5c.

Learlii.—Violet and blue flowers. Pkt. 10c.

Rubro Coerulea.—Very large, sky-blue flowers. Pkt. 10c.

Hederaea Grandiflora Alba.—Large flowers of pure white. Pkt. 10c.

Bona Nox (Evening Glory).—Rosy lilac flowers, expanding in the evening; of very rapid growth. Pkt. 5c.

Mexicana Alba.—At night and during dull days the plants are covered with an abundance of large pure white flowers, 5 to 6 inches in diameter. Very rapid grower. Pkt. 10c.

IMPERIAL JAPANESE (See list under Morning Glory)**IPOMEA QUAMOCЛИT (See Cypress Vine)****JAPANESE HOP (See Humulus Japonicus)****JOB'S TEARS (See Coix Lachryma)****KOCHIA TRICOPHYLLA (Summer Cypress)**

A splendid ornamental annual plant, forming dense oval bushes, 2 to 2½ feet high, of small, feathery, light green foliage. As summer advances this changes to a carmine hue and finally to a fiery red. A very attractive plant at all times. Also called "Burning Bush." Pkt. 10c.

KUDZU Vine (Pueraria Thunbergiana)

A new climber of great merit. This vine is one of the most rapid climbers there is, growing to 20 feet quickly. Called also Jack-and-the-Bean Stalk. Hardy perennial. (Pkt. 10c) (½ oz. 5c).



Kudzu Vine

LANTANA

Tender perennial, growing from 2 to 3 feet high, bearing Verbena-like clusters of flowers, in orange, white, rose and other colors, excellent for bedding.

Choice Mixed.—Pkt. 5c.

**LARKSPUR, OR DELPHINIUM**

Beautiful, hardy border perennials with noble spikes of handsome flowers, very useful for cut flowers, etc.

HARDY PERENNIAL LARKSPUR

Formosum.—Rich blue flowers, exceedingly effective in borders; height 3 feet. Pkt. 5c.

Cardinale.—Very beautiful strain with large handsome flower spikes of bright scarlet; height 4 feet. Pkt. 10c.

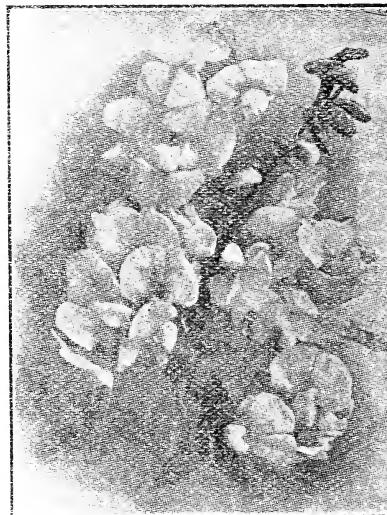
Sulphureum.—Long spikes of charming clear, yellow flowers; quite a distinct color among perennial larkspur; height 3 feet. Pkt. 10c.

Elatum Hybridum Double Mixed.—Large, handsome flower spikes, including the best of the new double and single varieties; height 3 feet. Pkt. 5c.

Hybridum Single Mixed.—Very showy strain. (Pkt. 5c) (oz. 40c).

LATHRYUS LATIFOLIUS (Everlasting Pea)

A hardy, perennial climber of great beauty with elegant sweet pea-like flowers in great profusion; height 6 to 8 feet.



Lathyrus Latifolius

Fine Mixed.—(Pkt. 5c) (oz. 80c).

White.—Pkt. 5c.

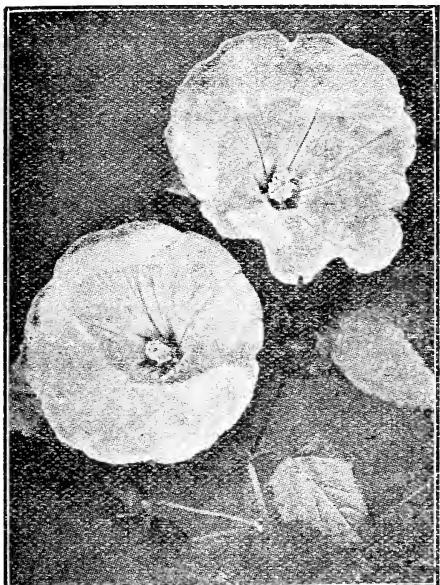
Red.—Pkt. 5c.

LAVATERA (Tree Mallow)

A showy hedge plant, growing about 6 feet high and covered with shrimp-pink, cup-shaped flowers. Sow in May in the open ground and thin young plants to 12 inches apart.

Trimestris Alba.—Beautiful large, glossy, pearly-white flowers. An effective contrast to the pink (Rosea). Valuable for borders or other decorative purposes. Pkt. 5c.

Trimestris Rosea.—Magnificent variety of a brilliant rosy-pink. Extremely useful for cutting, the blooms remaining in beauty for a long period. Pkt. 5c.

**Lavatera Rosea****LINUM, OR SCARLET FLAX**

A hardy annual, about one and one-half feet high. Of slender and graceful appearance, with smooth stems and bright red flowers, which are borne in great profusion. Can be sown early out of doors, and thrives well in good soil.

Rubrum—Pkt. 5c.

LEPTOSYNE MARITIMA (Sea Dahlia)

Along the seashore of Southern California grows this very bright yellow wildflower. The plant is about two feet high and has succulent divided foliage. Flowers three to four inches across; annual. Pkt. 5c.

LOBELIA

A hardy annual and perennial. The annual grows four to six inches high, is of compact growth, and literally covered with small bright flowers. By cutting back the plants during the summer and giving plenty of water they may be kept in flower all summer. Used for ribbon work and borders or hanging baskets.

Lobelia Hybrida Amanda.—Blossoms, which open rosy-like and pass to a deep amaranth red, an intense shade from which the sharply defined pure white eye stands out in telling contrast. Pkt. 15c.

Crystal Palace.—Undoubtedly the finest dwarf blue Lobelia for bedding. Plants very compact, profusely covered with rich blue flowers. Height 4 inches. Pkt. 10c.

Royal Purple.—Dark, bronzy green foliage, flowers rich purple-velvet with clear white eye. A splendid variety for ribbon borders, window boxes, etc. Height 6 inches. Pkt. 5c.

Bernard's Perpetual.—Flowers brilliant ultramarine blue, with a pure white mark at the base of each of the two lower petals; height 6 inches. Pkt. 5c.

Cardinalis Queen Victoria.—Beautiful perennial variety with vivid scarlet flowers and metallic crimson foliage; height 2 feet. Pkt. 10c.

LOVE-IN-A-MIST (See Nigella)**LOVE LIES BLEEDING (See Amaranthus Caudatus)****LUPINUS, OR LUPINS**

Hardy native California annuals, in great variety, growing from one to three feet high and bearing spikes of pea-shaped flowers. Of the easiest culture. Sow in the open ground and thin to six inches apart.

Hartwegi.—A great improvement on the common Lupin; flowers blue and white. Height 2 feet. Pkt. 5c.

Hartwegi Rosens.—Flowers of a rich rose color; height 2 feet. Pkt. 5c.

Hybridus Atrococneus.—The finest of all the genus; large spikes of scarlet, white-tipped flowers; height 2½ feet. Pkt. 5c.

Mutabilis.—Showy spikes of blue and white flowers; height 3 feet. Pkt. 5c.

Dunnettii Superbus.—Handsome spikes of flowers in yellow, purple and white; height 2 feet. Pkt. 5c.

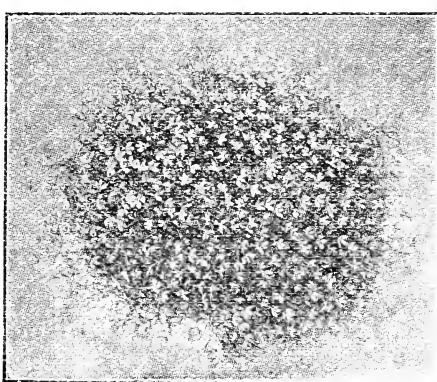
Sulphureus.—Long stems of bright yellow flowers, dwarf branching habit; height 8 inches. Pkt. 5c.

Hybridus.—Flowers ranging from pure white to golden yellow, and from palest mauve to richest purple, including many unusual and pretty shades. Pkt. 5c.

LYCHNIS

Hardy perennial growing about three feet high and bearing bright-colored flowers in clusters. Of easy culture.

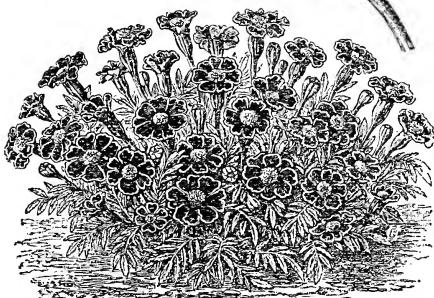
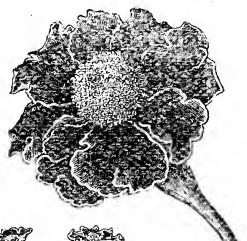
Haageana.—Orange, crimson and scarlet flowers. Pkt. 5c.



Lobelia

MARIGOLD

A hardy annual, in dwarf and tall varieties, growing from 6 inches to 3 feet high. The flowers are various shades of yellow and brown. The tall varieties are very valuable for large bedding or background work, and the dwarf varieties for borders.



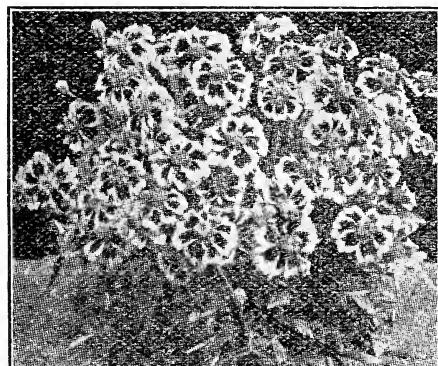
Marigold Gold Ring

Marigold Gold Ring.—The color is a dark velvety brown, gracefully surrounded by a distinct gold ring. The compact, bushy plant flowers abundantly and is more lasting than any other annual. **Pkt. 10c.**

African Tall Double Orange.—Beautifully formed flowers of gigantic size and bright color; height 2½ feet. **Pkt. 5c.**

Tall Double Lemon.—A charming shade of color; height 2½ feet. **Pkt. 5c.**

Tall Double Mixed.—Saved from the finest flowers; height 2½ feet. **Pkt. 5c.**



Marigold Legion of Honour

Legion of Honour.—Beautiful, free-flowering, single Marigold. Flowers bright, clear yellow, blotched with rich brown. Admirably adapted for beds or ribbon borders; height 9 inches. **Pkt. 5c.**

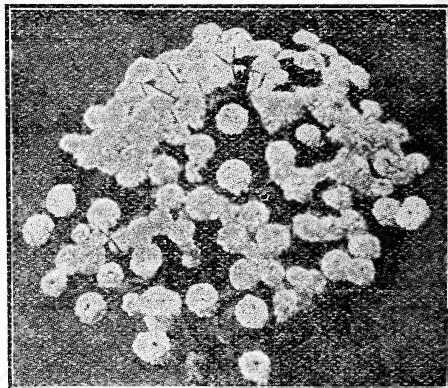
French Tall Striped.—The flowers have a yellow ground, with rich brown markings; height 2 feet. **Pkt. 5c.**

Tall Double Mixed.—A combination of the best varieties; height 2 feet. **Pkt. 5c.**

Dwarf Double Mixed.—Profuse flowering, and well adapted for a bedding display in autumn; height 1 foot. **(Pkt. 5c) (oz. 50c).**

MARVEL OF PERU (See Four O'Clock)**MATRICARIA (Double Feverfew)**

Bushy perennial garden plant, bearing quantities of white and yellow double button-like flowers; useful for cutting.



Matricaria

Golden Ball.—Very striking double golden yellow flowers; height 1 foot. **Pkt. 10c.**

Silver Ball.—Dainty, milk-white, fully double flowers, which make a pretty contrast with Golden Ball. **Pkt. 10c.**

MAURANDIA (Giant-Flowering)

Beautiful climber for either garden or greenhouse decoration and for hanging baskets; gemmed with Gloxinia-shaped flowers of rich purple, white and rose, fully double the size of the older, well-known sorts. The plants from seed sown in spring will begin flowering by July and continue until frost. Mixed colors. **Pkt. 5c.**

MIGNONETTE

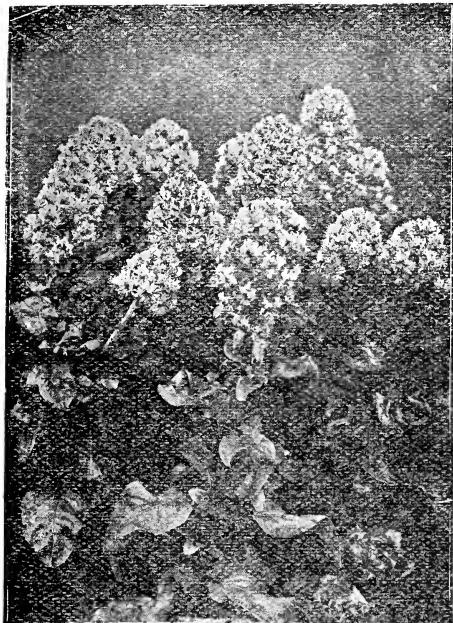
Hardy annual, growing 6 to 12 inches high and bearing pyramid-shaped spikes, exceedingly fragrant. Sow in the fall for early blossoms in the spring. Valuable for potting, bedding or border. The flowers are not attractive except for their fragrance.

Allen's Defiance.—Long spikes of whitish flowers and compact growth. **(Pkt. 10c) (oz. 50c).**

Parson's White.—A tall variety, with long spikes with silver-white flowers. **(Pkt. 5c) (oz. 50c).**

Grandiflora Amellorata.—Immense spikes of deep red flowers freely produced on sturdy plants of somewhat dwarf habit, height 15 inches. **Pkt. 5c.**

Victoria.—Flowers of a deep red color, well formed spikes; height 1 foot. **(Pkt. 5c).**



Mimosaette

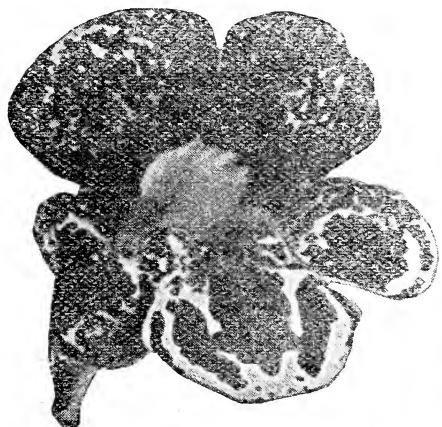
Goliath.—Robust growing variety with enormous spikes of red colored flowers; height 15 inches. Pkt. 10c.

Machet.—A dwarf compact variety, with large stubby spikes covered with copper-red flowers, etc. Pkt. 5c.

Sweet scented (Reseda Odorata).—(Pkt. 5c) (oz. 25c).

MIMULUS

A half hardy perennial, growing from 6 inches to 1 foot high. Blooms freely and exists in a large variety of colors. For gardens in a moist, shady situation. Blooms first year from seed if sown early.



Mimulus (Monkey Flower)

Moschatus, or Musk Plant.—Fragrant plant, with small yellow blossoms, spotted lightly with brown. Pkt. 5c.

Tigrinus, or Monkey Flower.—Large flowers of several colors, and spotted. Pkt. 10c.

Cardinalis.—Scarlet flowered perennial; 18 inches high; useful for a border; free flowering. Pkt. 10c.

MINA LOBATA

A fine annual climber which grows very rapidly to a height of 20 or 30 feet in a season. The leaves are of good size and dense, and the flowers are freely borne in clusters; orange red. Pkt. 10c.

MOMORDICA (Balsamina, or Balsam Apple)

A climbing annual, growing about 10 feet long. Has graceful and ornamental foliage, yellow flowers and warty golden yellow fruit, with large carmine-red seeds. Balsam Apple and Balsam Pear are climbers which thrive in hot locations, and are much planted around Bakersfield. (Pkt. 5c) (oz. 20c).

Charantia, or Balsam Pear.—Same as the Balsam Apple, but fruit is pear-shaped. (Pkt. 5c) (oz. 40c).

MOONFLOWER (See Ipomea Grandiflora Alba)

MORNING GLORY (Convolvulus Major) (See also, Ipomea)

Free flowering, beautiful climbers with rich and varied colored flowers, very useful for covering lattice work, verandas, etc., where they are exceedingly effective.

Imperial Japanese.—(Pkt. 5c) (oz. 25c).

Major Tall Mixed.—(Pkt. 5c) (oz. 15c).

Minor Dwarf Mixed.—A beautiful hardy bedding and border plant, attaining a height of about 1 foot. Pkt. 5c.

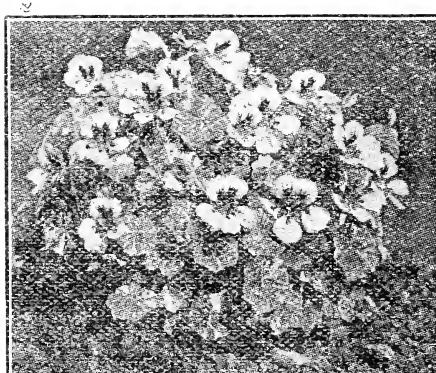
MOURNING BRIDE (See Seabiosa)

MUSK PLANT (See Mimulus Moschatus)

MYOSOTIS (See Forget-Me-Not)

NASTURTIUMS

Culture.—To grow Nasturtiums well and secure a fine display of flowers, it is necessary that the soil in which they are grown be very poor and dry, otherwise a superabundance of foliage will be produced to the exclusion of the flowers.



Nasturtium Dwarf Veriegated Leaved

Nasturtium, Dwarf or Tom Thumb.—Annual, 8 inches to one foot tall; useful for bedding and borders, flowering through the summer and also through the winter in location where they are not cut by frost.

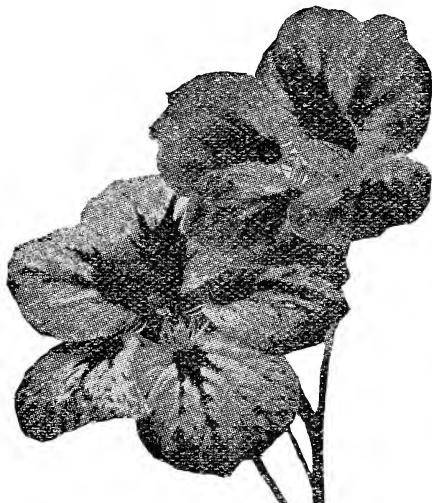
Chameleon.—A most remarkable Nasturtium. The markings and colors of the flowers on a single plant vary from sulphur yellow to deep crimson while others are beautifully spotted or marbled; height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

Crystal Palace Gem.—Primrose colored flower, blotched maroon; height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

Empress of India.—Flowers crimson scarlet, foliage dark green. Height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

King Theodore.—The darkest dwarf variety, deep maroon, foliage very dark green. Height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

King of the Tom Thumbs.—Flowers scarlet, foliage dark green. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).



Nasturtium Lady Bird

Lady Bird.—Flowers boldly marked with dazzling scarlet on a golden yellow ground. Splendid dark foliage, height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

New Scarlet.—Geranium-leaved, is of compact dwarf growth, bright scarlet flowers, leaves of unusual thickness; a plant desirable for beauty and also for its fine quality as a salad plant. (Pkt. 5c) (oz. 25c).

Othello.—Dark maroon flowers, height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

Pearl.—Flowers creamy white, height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

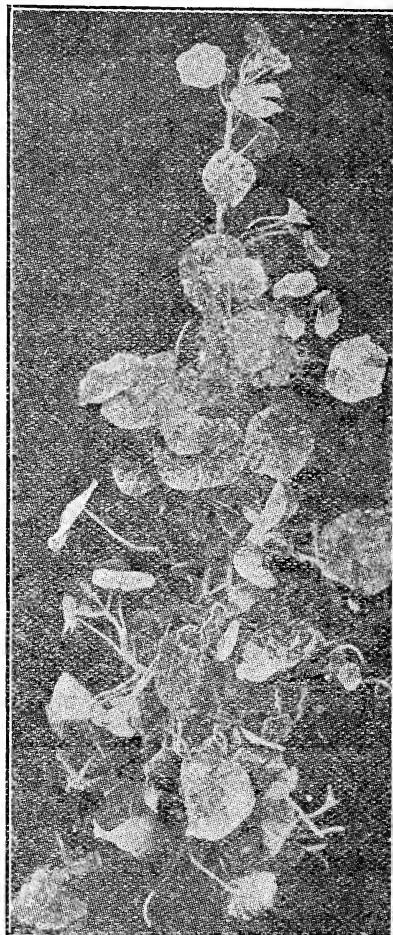
Ruby King.—Charming rose carmine flowers, dark foliage, height 1 foot. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

Fine Mixed.—Combination of all the dwarf varieties; makes a grand display in a large bed. (Pkt. 5) (oz. 10c) (1/4 lb. 30c).

NASTURTIUM, TALL

Climbing annuals, six to ten feet, of easy culture. Useful for covering fences, etc., and also very effective when allowed to run on the ground.

Butterfly.—Light yellow with blotch of deep red on the lower petal. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).



Nasturtium Tall

Dunnet's Orange.—Deep orange marked with crimson blotches. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

Chameleon.—A most remarkable Nasturtium. The markings and colors of the flowers on a single plant vary from sulphur yellow to deep crimson, while others are beautifully spotted or marbled. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

Crystal Palace.—Bright orange scarlet with bronze markings. (Pkt. 5c) (oz. 10c) (1/4 lb. 30c).

Midnight.—Flowers are a deep brownish red. The soft velvety texture of the petals being crumpled or partially folded. The foliage dark green. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c).

Sunlight.—Flowers are clear golden yellow of the largest size. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c).

Giants of Calif. Mixed.—This mixture is composed of the finest and most distinct varieties in this grand free flowering type. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Tall Mixed.—Of many bright colors, very effective. (Pkt. 5c) (oz. 10c) ($\frac{1}{4}$ lb. 30c).

NEMOPHILA, OR LOVE GRASS

A hardy annual California wild-flower, growing about six inches high. Has small, cup-shaped blossoms about one inch in diameter, in white and shades of blue.

Insignis (Baby Blue Eyes). Sky blue, with white eyes. Pkt. 5c; oz. 20c.

Maculata.—White, with each petal spotted violet at tip. Pkt. 5c; oz. 20c.

Insignis Alba.—A pure white flowered variety. Pkt. 5c.

NICOTIANA, OR FLOWERING TOBACCO

A half hardy annual, growing 3 feet high, with slender tubular flower. Belongs to the tobacco family. Requires plenty of room in the garden.

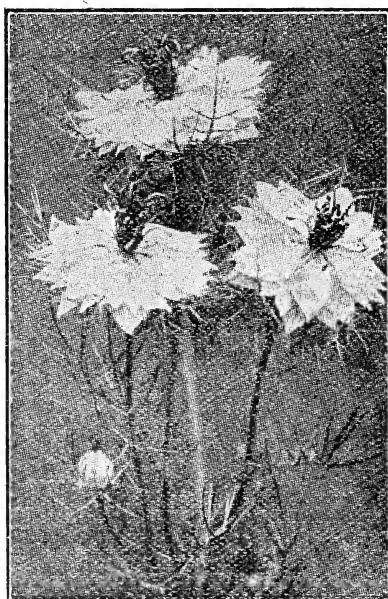
Affinis.—White, and very fragrant. Pkt. 5c.

Sanderacea.—A new, large, flowering type, with various bright-colored blossoms. Pkt. 10c.

Grandiflora Purpurea.—Reddish-purple flowers. A robust ornamental variety, excellent for sub-tropical garden. height 5 feet. Pkt. 5c.

NIGELLA (or Love-in-a-Mist)

A hardy annual, one foot high, with finely cut foliage. Oddly shaped blossoms in blue and white, and curious seed pods. Of easy culture.



Miss Jekyll.—Long stemmed flowers which are of a clear corn-flower blue, elegant foliage, height 18 inches. Pkt. 5c.

Alba Double Dwarf.—White, height 6 inches. Pkt. 5c.

ONOTHERA (or Evening Primrose)

An attractive hardy perennial border plant of dwarf compact habit, producing an abundance of bright showy flowers, in white, pale yellow, rose, etc. Of very easy culture, preferring a light dry soil.

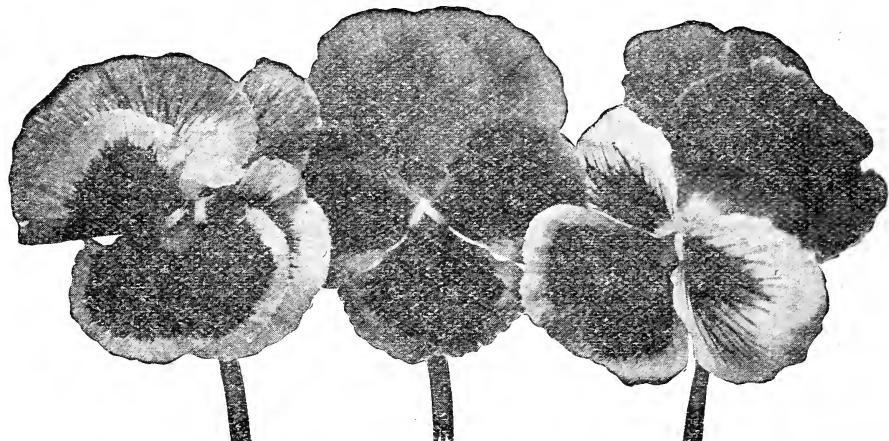
Fine Mixed.—Height 6 inches. Pkt. 5c.

PENTSTEMON
Height 2 feet; hardy perennials.

Hartwegi Hybrida Mixed.—The large Gloxinia shaped blooms vary from pure white, pink, rose and crimson to mauve and purple, including many which are beautifully edged. Pkt. 10c.

SUPERB PANSIES

All our Pansy seed is obtained from the most noted European specialists. Pansies thrive best in a moist, shady location and in rich loamy soil. Seed should be sown in the autumn for early spring blossoms, or can be sown early in the year for good flowers later in the spring. The plants must be transplanted twice in order to get the largest flowers; once from the seed box to a chosen bed, and again to the open garden. This is important for large size pansies; use manure liberally. The blossoms are usually larger in the spring and again in the fall, and while they bloom freely all summer, the blossoms are small during the hot months.



Emperor William (Ultramarine Blue).—Of fine texture, very showy. Pkt. 5c.

Lord Beaconsfield.—Purple-violet upper petals shading off to a light tint. Flowers large. Pkt. 5c.

Violet Purple.—Handsome flowers of a rich purple. Pkt. 5c.

Madam Perret.—Striking and distinct variety of unusually compact habit. The lower petals are generally of canary-yellow, white or rose-pink marked with purple or crimson. The upper petals bright red and deep purple or outlined with a margin of white. Pkt. 5c.

Gold Margined.—A strikingly handsome variety. Pkt. 5c.

Silver Edged.—Splendid deep purple flowers; petals evenly laced with narrow silver margin. Pkt. 5c.

Striped and Mottled.—Large flowers handsomely striped and mottled. Pkt. 5c.

Masterpiece Exhibition.—The finest strain of pansies in cultivation, saved only from the largest and best shaped flowers of the richest colors which are elegantly curled and undulated, some so full as to appear double. Pkt. 25c.

Masterpiece Germania.—Not quite so large as our Masterpiece Exhibition, but of the same type. For bedding, this mixture gives a most striking effect. Pkt. 15c.

Trimardeau or Giant Mixed.—A very showy class of vigorous compact growth, flowers of an enormous size, finest strain. Pkt. 10c.

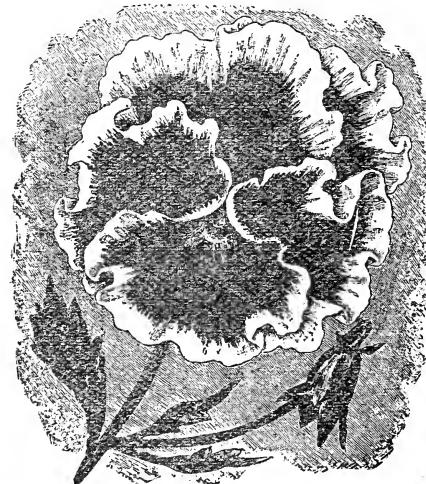
Parisian Large Stained Mixed.—Beautiful improved strain of Trimardeau pansies, mostly white ground and fine blotched varieties. Pkt. 10c.

Cassiers Large Flowered Blotched.—The largest flowered class of blotched pansies. An incomparable strain, producing many beautiful and rare varieties. Pkt. 15c.

Snowflake.—Large flowers of pure white. Pkt. 10c.

Faust (King of Blacks).—Large, well formed, glossy black flowers. The plants are compact and bloom for a long time. Pkt. 5c.

Bugnot's Superb Blotched.—Very beautiful class, of enormous flowers with broad blotches, many having the two upper petals finely lined, showing a great diversity of handsome and rare colors. Pkt. 15c.



Pansy Faust.

Pansy Faust.—Not many of the pansy varieties have such a winning appearance as Faust. The characteristic five velvety, violet blotches are surrounded by a broad white edge. It is an ideal exhibition or market pansy. Pkt. 15c.

EXTRA FINE GIANT-FLOWERED PAN-SIES

Giant White.—Very large, well formed white flowers with dark purple eye. Pkt. 10c.

Giant Pale Blue.—Gigantic blooms of a delicate mauve-blue shade with paler center, freely produced on compact plants. Pkt. 10c.

Giant Yellow (Black Eye).—Large handsome flowers of a rich yellow with black eye. Pkt. 10c.

Giant White (Black Eye).—Large well formed flowers with black center. Pkt. 16c.



Pansy Giant Andromeda

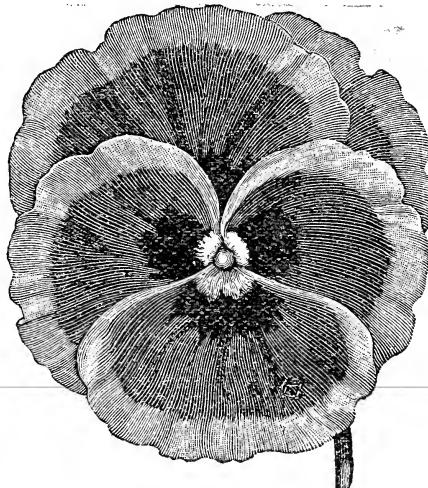
Pansy: New Giant Curled Andromeda. A charming new strain of pansy with elegantly frilled flowers, some so full as to appear double. The color is a very delicate apple-blossom, generally showing a soft lavender blue or rosy lilac hue, rendered still more effective by a somewhat darker veining. The blooms are of immense size, with grand substance and free from any coarseness or flimsiness. Unusually true to color from seed. A decided acquisition. Pkt. 20c.

French Large Flowered Mixed.—An excellent strain. Pkt. 5c.

Odier Mixed.—Extra choice; very fine strain of three and five blotched show pansies. Pkt. 5c.

English Mixed.—The old faced pansy plant of compact habit. Pkt. 5c.

Pansy Giant Eros.—This grand novelty produces very large flowers of a deep velvety brown color, with a broad golden yellow margin. The back of each bloom has the same broad margin as the front side, while the dark velvety center is shining through. Pkt. 15c.

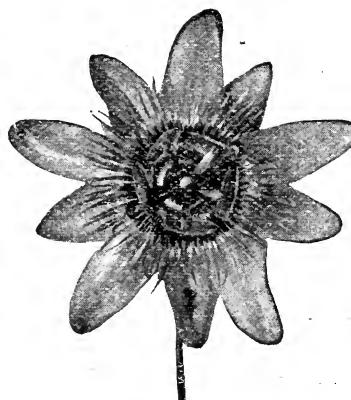


Pansy Giant Eros

PASSION FLOWER

A hardy perennial climber, very satisfactory for immense growth as it will cover a porch of small cottage in one season.

Passiflora Edulis.—See page 7.



Passion Flower

Alba.—Pure white. Pkt. 10c.

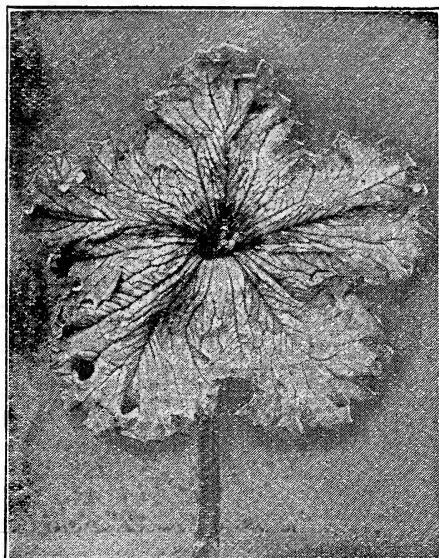
Coerulea Grandiflora.—Sky-blue. Pkt. 10c.

Pink.—Pkt. 10c.

PELARGONIUM. See Geranium.

PETUNIA

A splendid race of plants, rich and varied colors, and profuse flowering with their charming and tender looking flowers, they are very beautiful for groups in the open. For pot culture also, Petunias are almost unsurpassed. Sow seed early in spring, scatter thinly on an even surface and barely cover the seed with sand. If intended for the open ground plant out into a frame to be kept till planting-out time. If for pots, pot singly into small pots in strong rich soil mixed with sand and shift as the plants grow larger.



Petunia Giants of California

Giants of California Single.—The largest of all Petunias having gigantic flowers with beautifully veined throats. Pkt. 15c.

Superb Double Fringed Mixed.—One of the finest strains of Petunias in existence. The double flowers are very large, full and symmetrically formed, having the edges of the petals beautifully fringed. Pkt. 35c.

Inimitable Single Striped and Blotched.—Twice the size of the ordinary Petunias. Bold violet and white markings. Pkt. 10c.

Fimbriata.—The most imposing Petunia yet introduced. Large finely rimbricated flowers of a great diversity of charming colors. Pkt. 20c.

Grandiflora Single Mixed.—Exceedingly handsome and free flowering, containing the greatest variety of colors, yellow throated, veined and blotched. Very large flowers. Pkt. 25c.

Hybrida Fine Mixed.—The best Petunia for massing in beds and borders, yielding a profusion of brilliantly marked flowers. Pkt. 5c.

PHLOX DRUMMONDII. Grandiflora.

A hardy annual, growing from six inches to one foot high and bearing beautiful, soft-petaled and brilliantly colored flowers all spring and summer. Fine for bedding and massing. Sow seed in the fall for early flowers.

Drummondii Grandiflora Alba.—Pure white flowers, very large and perfectly formed. Height, 2 feet. Pkt. 5c.

Coccinea.—Habit similar to Alba. Color brilliant scarlet, flowers profusely. Height, 2 feet. Pkt. 10c.

Isabellina.—A splendid strain of Phlox; flowers of a soft primrose color. Height, 2 feet. Pkt. 10c.



Phlox

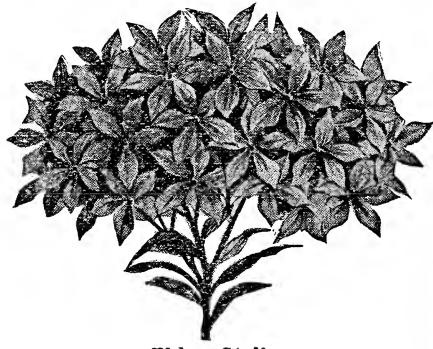
Drummondii (Dwarf Snowball).—A dwarf, compact and very free blooming Phlox. Flowers large and pure white. An excellent companion to Fireball. Height, 1 foot. Pkt. 10c.

Drummondii Fireball.—Habit similar to the Snowball; color brilliant red; flowers profusely. This and Snowball are two of the most effective varieties of Phlox in existence. Height, 1 foot. Pkt. 10c.

Finest Mixed.—Pkt. 10c; oz. 50c.

Perennial.—Indispensable for border plant. Seed saved from the finest bright colored flowers. Height, 2 feet. Pkt. 10c.

Drummondii Dwarf Mixed.—A selection of brilliant colors, strongly recommended for beds, edgings or borders. Pkt. 5c.



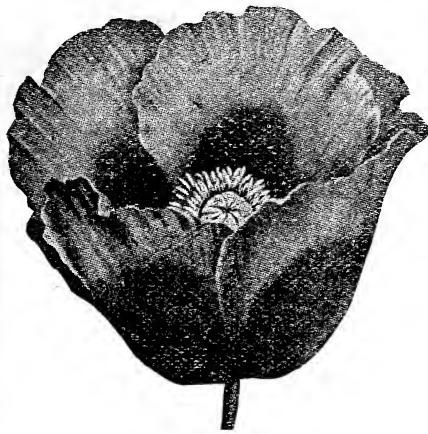
Phlox Stella

Cuspilata (or Star Phlox Stella.)—A flower a color which strongly resembles that of the popular dwarf sort Fireball. Excellent for dwarf groups and for pots. Height, 1 foot. Pkt. 15c.

POPPIES

The different varieties of poppies are always favorites for outdoor display and the cultivation of them being so extremely simple entitles them to a place in every garden. Seed should be sown where

the plants are intended to flower, because it is difficult to transplant them with any measure of success. During March or April sow in rows or groups and thin to about 1 foot apart.



Poppy Charles Darwin

Charles Darwin.—Handsome flowers of a rich dark purple, with a large velvety black spot starting from the base of each petal. Pkt. 15c.

Umbrosum.—Dwarf habit, bright crimson flowers, distinctly spotted with black. Pkt. 5c; oz. 20c.

Nudicaule (Iceland Poppy).—A beautiful class of dwarf Perennial Poppies, which if sown in March will flower the same year. The blossoms are bright and showy, borne on slender stems about 1 foot high. Useful for cutting and the flowers exhale an agreeable perfume.

Nudicaule Yellow.—Pkt. 5c; oz. 50c.

Mixed Colors.—Pkt. 5c; oz. 45c.

Admiral.—Large, pure white, single paeony flowered variety, with band of brilliant scarlet around the top. Pkt. 5c; oz. 35c.

Danebrog or Danish Cross.—Very showy variety, producing large flowers of brilliant scarlet, with a silvery-white spot on each petal, forming a white cross. Pkt. 5c; oz. 20c.

Glaucum (Tulip Flowered).—Beautiful variety, producing flowers of the most vivid scarlet, effective for beds or masses. Pkt. 5c; oz. 50c.

Mikado.—Effective double poppy with deeply lacinated petals; white and rose above. Pkt. 5c; oz. 25c.

Carnation Double Mixed.—Choice assortment of brilliant colors. Flowers very double and well fringed. Pkt. 5c; oz. 20c.

Paeony Flowered Double Mixed.—Impressive double globular flowers. Well adapted for shrubberies and large borders. Pkt. 5c; oz. 25c.

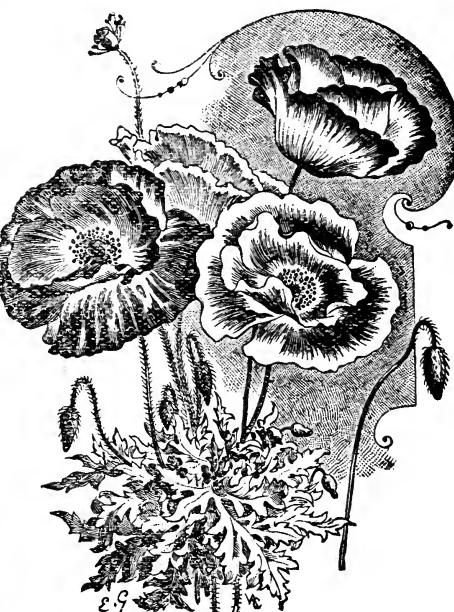
Alpinum (Alpine Poppy).—A charming little poppy with bright flowers resembling those of the Iceland Poppy, but the plants are more dwarfed. Excellent for sunny borders or rock work. Height 6 inches. Pkt. 10c; 1/4 oz. 75c.



Poppy King Edward

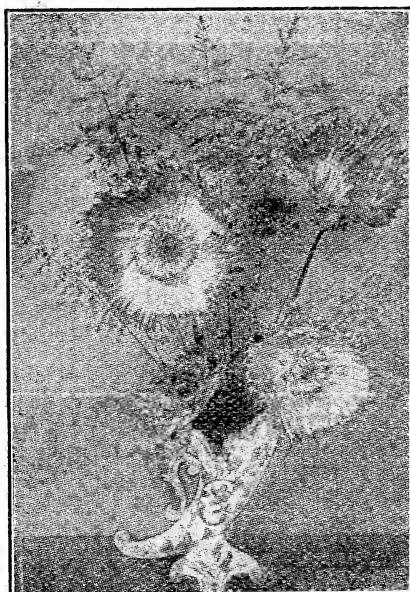
Poppy King Edward.—With this new novelty we have added to the rich collection of single annual Poppies growing 2 1/2 feet in height, deep scarlet, shaded crimson red of gorgeous effect, which is heightened by the large black blotch adorning each petal for half its length from the base. From this sable hue the yellow anthers stand out in appropriate contrast. Pkt. 15c.

Shirley.—The most charming poppy in cultivation. The blossoms are bright and showy and include an almost endless variety of colors, from pure white, pink, terra cotta, salmon, chamois, and rosy carmine, to brilliant crimson, many of the flowers being beautifully flaked or edged with white. Pkt. 5c; oz. 25c.



Poppy Shirley

Virginian Poppy.—This new large flowering poppy of the annual class produces beautiful large, white flowers with fringed soft pink edge. Cut flowers in vases, etc., are of quite a charming effect, and are for this purpose especially recommended as they are very lasting when cut in the morning, as a color-showing bud. Pkt. 10c.



Poppy Virginia

PORTULACA

Beautiful race of dwarf plants for rock work or dry sunny locations, bearing glossy cup-shaped blossoms in brilliant colors.

Double Mixed.—Saved from the finest flowers only, and will produce a large percentage of doubles. Pkt. 10c.

Single Mixed.—Large flowers. Pkt. 5c; oz. 50c.

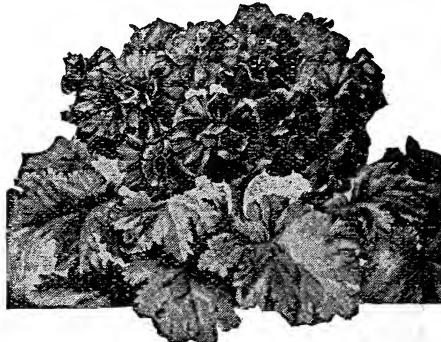
LARGE PRIMULA, or CHINESE PRIM-ROSE

Charming profuse blooming plants, indispensable for winter and spring decoration in the house. For a succession of blooming plants sow the seed from March to May and again in July or August. In planting, cover the seed lightly and keep moist, transplant when the second leaf appears and keep repotting the plants as they grow and increase in size.

Chinensis Fimbriata Mixed.—Beautiful fringed flowers of gigantic size and great substance. Foliage elegantly curled. Pkt. 25c.

Chinensis Stellata or (Star Primula) Mixed.—A distinct and beautiful class; will be found indispensable for general decoration work. Pkt. 25c.

Auricula.—Choice mixed, saved from all the best sorts, embracing many delicate and brilliant shades. Pkt. 10c.



Primula

Japonica Mixed.—Bright and snowy flowers, borne in whorls and stems 6 to 8 inches long. Pkt. 10c.

PYRETHRUM

Handsome plants of easy culture. Invaluable for bedding purposes, especially for ribbon borders.

Golden Feather.—Fine compact habit of growth, with bright yellow foliage, largely used for edgings and ribbon borders. Height, 9 inches. Pkt. 5c.

Selagionides.—A distinct form with moss-like foliage, quite as bright in color as the Golden Feather and does not flower till late in the season. Height, 6 inches. Pkt. 5c.

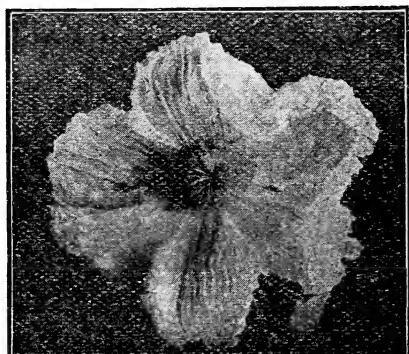
Roseum.—A hardy perennial, with red petaled flowers radiating from a golden yellow center. Bubach, or insect powder, is made from the dry leaves. Pkt. 5c.

RICINUS (Castor Oil Plant)

Effective for semi-tropical gardens. Easily raised from seed, and should be grown in deep rich soil.

Cambodgiensis.—The main stem and leaf stalks are shining ebony, leaves large, regularly divided and richly colored. The foliage assumes different shades as the plant increases in size. Height, 8 feet. Pkt. 5c.

Ricinus Gibsoni.—A very fine variety with rich, lustrous, red foliage. Height, 5 feet. Pkt. 5c.



Romney's Coulterii

ROMNEYA COULTERII (California Tree Poppy)

Also well known as the Matilija Poppy; perennial. It is of value as a cut flower lasting well in water, and its delicate primrose-like perfume is most acceptable. They never lose the crumpled folds that in the case of most poppies betoken newly opened state. Flowers are four to five inches across, pure white, with a fine bunch of yellow stamens, resembling white, single peonies. Pkt. 10c.

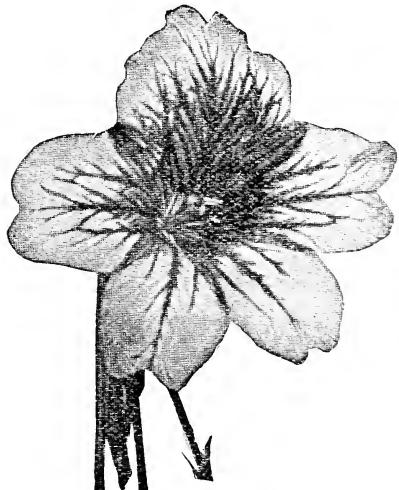
RUDBECKIA (Bicolor Superba)

Coneflower.—Fine free flowering annual variety, forming a dense bush and producing in great abundance on long stems its bright flowers. The disc is brown, the flowers golden yellow, with large velvety brown spots at the base. Very effective and useful for cutting. Pkt. 10c.

Lacinata.—A single, bright yellow perennial plant, blossoming in the late summer. Four to six feet tall. The double form known as Golden Glow is propagated by division of the root crown. Pkt. 10c.

SALPIGLOSSIS

Highly ornamental half-hardy annual with large, veined, funnel-shaped flowers; much prized for cutting; very showy in beds or border. A bed of these beautiful plants is one of the most striking features of the garden during July and August.



Salpiglossis

Fine Mixed.—Pkt. 5c.

SALVIA, OR FLOWERING SAGE

A tender perennial blooming the first season from seed and growing two or three feet high. The blossoms are borne on long stems in racemes or spikes, and are fragrant.

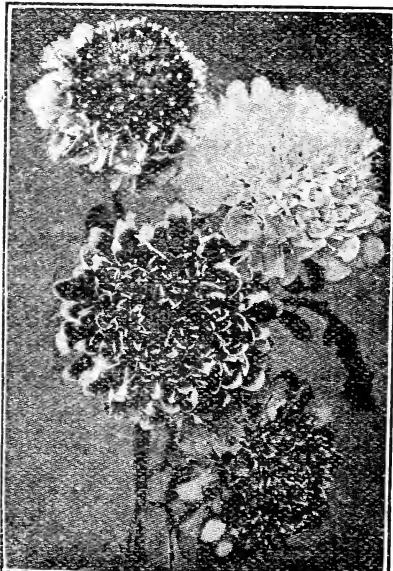
Splendens.—Gorgeous plants, with numerous flowers, which are displayed with striking effect against the deep green foliage. A bed of this flower is exceedingly beautiful during the autumn; height, 2 feet. Pkt. 5c.

Patens.—Valuable for bedding; bright blue flowers. Height, $2\frac{1}{2}$ feet. Pkt. 10c.



Salvia

Coccinea Lactea.—A fine, pure white flowering variety. Height, 2 feet. Pkt. 5c.
SCARLET FLAX. See Linum..



Seabiosa

SCABIOSA, OR MOURNING BRIDE. Also called Sweet Scabious, Old Maid's Pin-cushion, etc.

The tall flowers are especially adapted for cutting and massing in the garden. Annual (self sown in California), $\frac{1}{2}$ to 4 feet high. These new flowers are double clear to the center, covering the thimble-shaped cone.

Tall Double Mixed—Immense flowers; very double. Pkt. 5c.

Dwarf Double Mixed.—Beautiful colors; very effective. Height, 12 inches. Pkt. 5c.

Caucasia.—A highly decorative variety. Flowers large and of a soft mauve or heliotrope color. Height, 2 feet. Pkt. 10c.

Snowball.—Large head of lovely pure white flowers. Height, 3 feet. Pkt. 5c.

SCHIZANTHUS

Very beautiful and interesting annuals. Indispensable for green house and conservatory decoration or outdoor culture.

Wisetonensis.—Flowers large and of various pleasing shades, height 2 feet. Pkt. 25c.

Finest Mixed.—A mixture of all the most showy varieties, height 2 feet. Pkt. 5c.

SENSITIVE PLANT

An interesting plant, the leaves of which close when touched; elegant foliage; flowers pink. Pkt. 5c.

A SUPER-SENSITIVE PLANT—(ALMOST HUMAN) A Botanical Curiosity

So sensitive is this plant that if touched the leaves will fold and stems drop down. A lighted match being applied to one of the leaves, it will cause the whole plant to violently close up as if in pain. If a glass jar with a piece of cotton saturated with chloroform is placed over the plant it will cause it to slowly sleep. At night the plant closes; at daylight it opens. The plant will grow to a height of from two to four feet, has beautiful green leaves and pretty pink flowers. Price of seed, 5c per packet.

Smilax.—A climbing perennial, with beautiful, bright-green, glossy leaves, much esteemed for its long, delicate sprays of foliage. Largely used for decorating. Start seed under glass and transplant six inches apart. It requires strings or wires to climb on when very young. Pkt. 5c; oz. 5cc.



Sundowner (Helianthus)

SUNFLOWER (Helianthus)

Stately hardy annuals of easy culture. The smaller flowered varieties being also useful for cutting.

Miniature.—Very popular Sunflower of branching habit, producing in great abundance, small golden yellow flowers with black centers. Exceedingly valuable for cutting. Height 4 feet. Pkt. 5c.

Dwarf Miniature.—Remarkably dwarf compact strain of this favorite flower, the plant forms perfect little bushes, thickly studded with blooms, height 12 inches. Pkt. 10c.

Double Dwarf.—Very attractive variety covered with an abundance of golden yellow flowers, height 3 feet. Pkt. 5c.

California Double.—Large, massive bright yellow flowers, height 6 feet. Pkt. 5c.

SNAPDRAGON. See Antirrhinum.

STATICE (Sea Lavender)

Splendid hardy perennials, with tufted grass-like foliage, from which issue long stems terminating with large globular heads of rose pink flowers. Sometimes called sea pinks.

Suworowii.—Flowers bright rose color. Valuable for winter bouquets. Pkt. 5c.

STOCKS (Ten Weeks' Stocks, or Gilliflowers; Levkoje)

The Stock is one of the many popular plants used for bedding. For brilliancy and diversity of color, fragrance, profusion and duration of bloom it is unsurpassed. Hardy annual.

Giant Beauty of Nice.—Branching; excellent for winter if sown in July or August. Delicate flesh pink spikes of double flowers. Height 2 inches. Pkt. 10c.

Giant Queen Alexander.—Similar to the above except in color, which is rosy lilac. Pkt. 15c.

Giant Crimson King.—Long spikes, of a rich crimson color. Pkt. 15c.

Giant Almond Blossom.—Quick growth with flowers of a very large size. The color is white shaded carmine. Pkt. 15c.

Empress Elizabeth.—Carmine pink spikes of double flowers. Height, 15 inches. Pkt. 10c.

PERPETUAL, OR BRANCHING

Cut and come again, 10 weeks; are especially valuable during summer and winter for cut flowers. They grow out numerous side branches, all bearing very double fragrant flowers.

Carmine.—A striking variety with deep crimson flowers. Pkt. 10c.

Chamois.—Large flowers of a charming buff-pink. Pkt. 10c. . .

Shining Purple.—Free flowering and will be valued where cut flowers are required. Pkt. 10c.

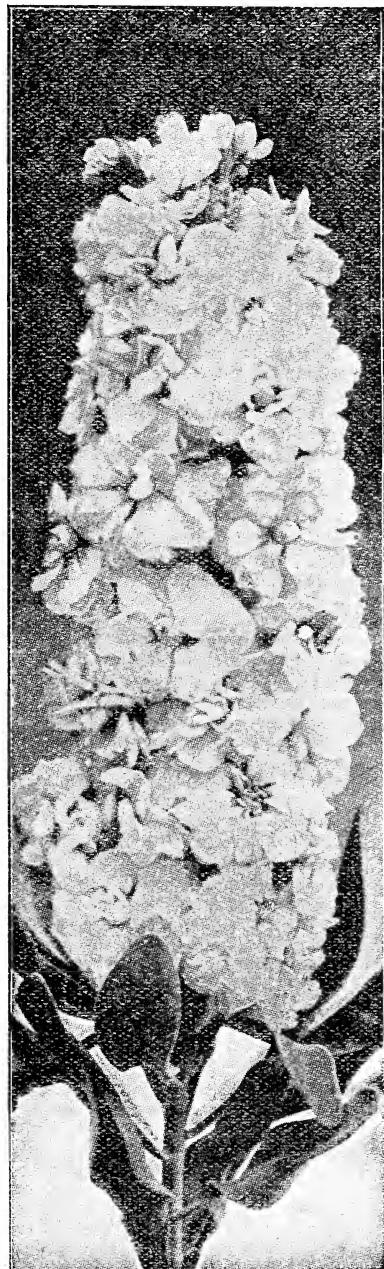
Princess Alice.—Beautiful white flowers. Excellent for cutting. Pkt. 10c.

Apple Blossom.—The long spikes of apple-blossom flowers are produced on plants of compact habit. Pkt. 10c.

Perpetual or Branching Mixed.—Finest assorted colors. Pkt. 10c.

Dwarf German Ten Weeks.—Finest mixed brilliant colors only. Pkt. 10c.

Giant Perfection Ten Weeks Mixed.—Branching habit; very large and full double flowers, the plants growing to a height of 15 to 18 inches. Pkt. 10c.



Stock Mont Blanc

Stock Mont Blanc.—This is indeed a wonderfully fine type of the largest white sweet-scented flowers. This variety can be cultivated either as a summer or as a winter stock, and owing to its unrivalled freedom of bloom will be found excellent for bedding or for culture. Pkt. 20c.

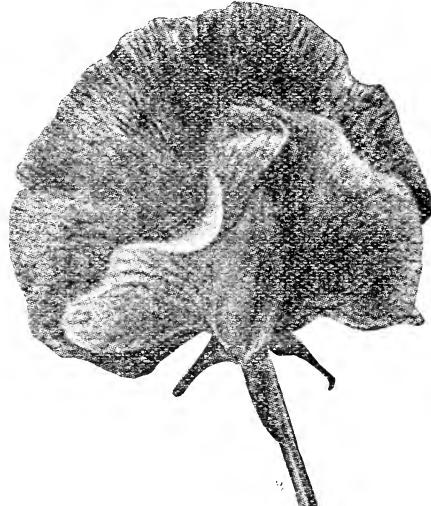
Brompton or Winter Finest Mixed.—These varieties give a large percentage of double flowers of a pleasing combination of colors. Plants of a compact habit. Pkt. 10c.

Large Flowering Dwarf Ten Weeks Mixed.—A fine type of the ordinary large flowered strain. A large percentage of the flowers coming double. Pkt. 10c.

GIANT SPENCER TYPE

SWEET PEAS—SPENCERS

Aggeler & Musser Selected Giant Orchid Flowering Sweet Peas.—A grand new class of Sweet Peas, having large round open flowers of extraordinary size, often two inches across, with wavy standard and wide spreading wings. Bears profusely, often four flowers on a stem.



Othello Spencer

American Spencer.—Scarlet striped with white. (Pkt. 10c) (oz. 30c).

Asta Ohu, Spencer.—Soft pinkish lavender, self. Very large and wavy. (Pkt. 10c) (oz. 35c).

Black Knight, Spencer.—Deep maroon, very large. (Pkt. 10c) (oz. 35c).

Clara Curtis, Spencer.—Very large, wavy cream or light primrose. (Pkt. 10c) (oz. 45c).

Countess Spencer.—“Hybrid.” a very large flowered variety, a lovely shell pink but sports various shades of pink, rose and lavender. Flowers usually four on a stem. (Pkt. 10c) (oz. 35c).

Dainty Spencer.—White with pink wavy edges. (Pkt. 10c) (oz. 35c).

Elfrieda Pierson Spencer.—Light pink or white, edged and shaped. (Pkt. 10c) (oz. 40c).

Florence Morse Spencer.—Delicate blush with pink margin; very large and one of the best Spencer varieties. (Pkt. 10c) (oz. 35c).

Etta Dyke Spencer.—Very large wavy, pure white. (Pkt. 10c) (oz. 45c).

Geo. Herbert Spencer.—A large Spencer rose crimson, suffused with magneta. (Pkt. 10c) (oz. 35c).

Helen Lewis Spencer.—Bright orange salmon. Very large, beautifully waved. (Pkt. 10c) (oz. 35c).

King Edward Spencer.—Most beautiful and richest of all the red shades. This large beautiful waved flower stands by itself, a bright crimson scarlet. (Pkt. 10c) (oz. 35c).

Loyalty Spencer.—Bright blue striped on white. (Pkt. 10c) (oz. 40c).

Margaret Madison Spencer.—Beautifully waved, light blue. (Pkt. 10c) (oz. 35c).

Mrs. Hugh Dickson Spencer.—Beautifully wavy apricot on cream. (Pkt. 10c) (oz. 40c).

Mrs. Rountzahn Spencer.—A beautiful blending of straw color, tinted with blush pink and shading to apricot and rose at edges. (Pkt. 10c) (oz. 35c).

Othello Spencer.—Deep rich maroon, very dark and adapted for many attractive combinations. (Pkt. 10c) (oz. 35c).

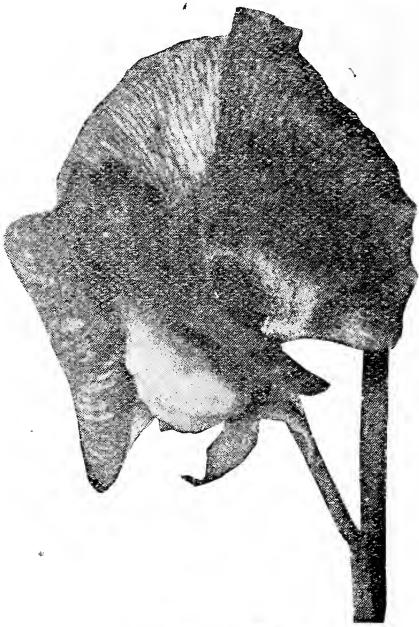
Queen Alexandra Spencer.—The nearest approach to a true scarlet. (Pkt. 10c) (oz. 40c).

Spencer Mixed.—A splendid mixture of all the different Spencer types. (Pkt. 10c) (oz. 25c).

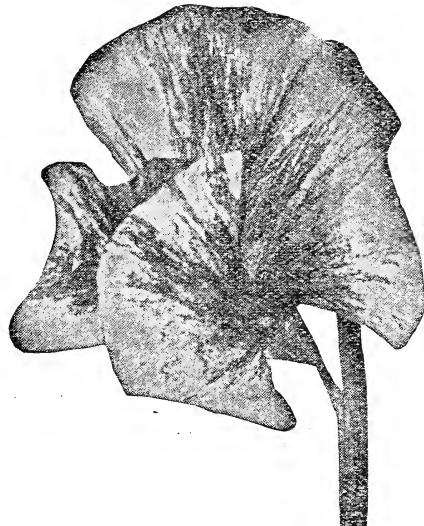
Brilliant Blue.—A dark stain of navy blue. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Dorothy Eckford.—White, large shell-shaped. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Helen Pierce.—Clear blue marbled on ivory white, frequently called Gloxinia flowered on account of its speckled effect. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).



Queen Alexandra



Aurora

SELECTED GRANDIFLORA TYPES IN SEPARATE SHADES

Blanche Ferry.—Rose standard, tinted with light pink. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Henry Eckford.—Very large orange scarlet. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Hon. E. Kenyon.—A fine large primrose yellow. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

King Edward, Seventh.—Bright showy scarlet. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Lady Grisel Hamilton.—Delicate silvery lavender. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Miss Willmott.—Bright orange pink showing veins of deeper pink. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Othello.—Deep maroon, very large, finest type. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Prima Donna.—The most popular clear pink hooded. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Princess of Wales.—Popular rose colored. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Queen Alexandra.—The nearest approach to a true scarlet. (Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 50c).

Mixture representing all shades.—(Pkt. 5c) (oz. 15c) ($\frac{1}{4}$ lb. 40c) (1 lb. \$1.25).

UNWIN TYPE

A. J. Cooke.—Large mauve blue with waved standard. (Pkt. 5c) (oz. 15c).

E. J. Castle.—Fine carmine rose, waved standard. (Pkt. 5c) (oz. 15c).

Frank Dolby.—Fine pale mauve self, with wavy standard. (Pkt. 5c) (oz. 15c).

Gladys Unwin.—Distinct frilled standard and open waves, pretty pale pink shade. (Pkt. 5c) (oz. 15c).

Nora Unwin.—Large frilled white flower. (Pkt. 5c) (oz. 15c).

CUPID OR DWARF SWEET PEAS

The Cupid varieties are very showy and splendid for bedding. Height six inches. Plant the seed six inches apart.

Mixed.—(Pkt. 5c) (oz. 25c).

WINTER FLOWERING SWEET PEAS

A valuable race of early flowering sweet peas, which from a September sowing will give an abundance of blooms from Christmas onwards. On account of their delightful perfume, sweet peas are particularly welcome during the days of winter.

A. & M. Xmas Dark Blue.—(Pkt. 5c) (oz. 25c).

A. & M. Xmas Lavender.—(Pkt. 5c) (oz. 25c).

A. & M. Xmas Pink and White.—(Pkt. 5c) (oz. 25c).

A. & M. Xmas Red.—(Pkt. 5c) (oz. 25c).

A. & M. Xmas Soft Pink.—(Pkt. 5c) (oz. 25c).

A. & M. Xmas White.—(Pkt. 5c) (oz. 25c).

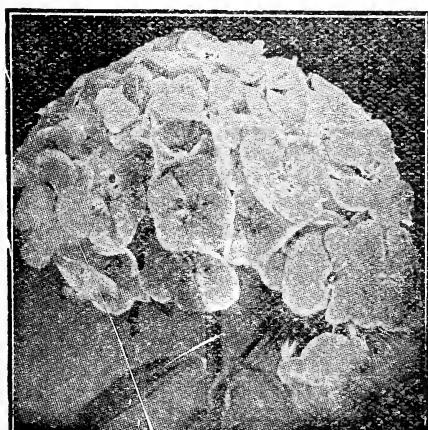
A. & M. Xmas Mixed.—Pkt. 5c) (oz. 25c).

Perennial or Everlasting.—See *Lathyrus*.

SWEET SULTAN.—See *Centaurea Moschata*.

SWEET WILLIAM. (*Dianthus Barbatus*)

A hardy perennial, blooming the second year from seed. Grows one to two feet high and bears its flowers in clusters, at the end of a stiff stem. The individual flowerets are handsomely colored and marked. It makes a beautiful bedding plant, and is of easy culture.



Sweet William

Pink Beauty.—An exquisite shade of pure pink. Large single flowers. Height, 8 inches. Pkt. 5c.

Single Varieties.—Mixed.—More attractive than the double. Pkt. 5c; oz. 25c.

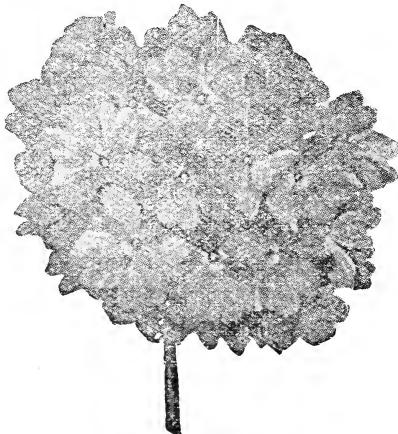
Double Varieties.—Mixed.—Pkt. 5c.

THUNBERGIA, (or Black-eyed Susan).—A hardy climber, growing about four feet long, and valuable for low fences or hanging baskets. Prefers a sunny situation. Blossoms are buff, orange or white, with dark centers. Mixed. Pkt. 5c.

TROPASOLUM CANARIENSIS. See Canary Bird Flower.

VERBENA

A half hardy trailing perennial of easy culture. It is well known as a bedding or border plant, and the improved large flowered and fragrant strains make it a handsome cut flower for low vases.



Verbena Rose Queen

Mammoth Flowered.—Mixed.—Pkt. 10c; 1-4 oz. 35c; oz. \$1.25.

Pink Shades.—Mammoth strains of rose and pink shades. Pkt. 10c; 1-4 oz. 35c; oz. \$1.25.

Pure White.—Mammoth strain. Pkt. 10c; 1-4 oz. 35c; oz. \$1.25.

Purple and Blue Shades.—Mammoth strain Pkt. 10c; 1-4 oz. 35c; oz. \$1.25.

Mammoth Rose Queen (new).—Large brilliant rose. A splendid bedding plant. Pkt. 20c.

Scarlet Defiance.—Brilliant scarlet. Pkt. 10c; 1-4 oz. 35c; oz. \$1.25.

Striped Varieties.—Mixed.—Pkt. 10c.

Lemon Scented.—This favorite old sweet scented perennial may be readily raised from seed. The delightful lemon fragrance of the leaves is very refreshing and pleasant. Pkt. 10c.

Vine, or Madagascar Periwinkle.—A tender perennial, with ornamental foliage. Blooms freely the first year from seed. The trailing blue Vinca or Myrtle never seeds; see plant list. **Mixed. Rose, Crimson, White, etc.** Pkt. 5c.

VIOLETS

Hardy perennial, blooming freely throughout the summer and autumn; of easy culture.

Viola Cornuta Purple.—Fine, rich, purple.
Pkt. 10c.

Viola Cornuta White.—Pure white flowers, freely produced. Pkt. 10c.

The Czar.—Large, fragrant, deep violet flowers. Pkt. 10c.

Princess of Wales.—Largest flowering deep blue. Pkt. 10c.

VIOLET, OR VIOLA ODORATA Single, Sweet-scented. Pkt. 10c.

VIRGINIA CREEPER

Ampelopsis Quinquefolia.—Perennial climber. Large leaves which color in the fall; also bears clusters of dark fruit; flowers inconspicuous. Very ornamental and easily raised from seed. Height 30 feet. (Pkt. 5c) (oz. 25c).

VIRGINIA STOCKS

A hardy annual, growing about 9 inches high; can be had in continuous bloom by sowing the seed at frequent intervals during spring and summer.

Red and White Mixed.—Pkt. 5c.

WISTERIA

A tall, rapid-growing vine with feathery foliage and handsome flowers. The glorious blossoms, radiant in their inherent ornamental splendor, are profusely borne in long drooping clusters in mid-spring and gleam in soft tones of violet-purple.

Chinensis.—Violet purple. Pkt. 10c.

Brachybotrys.—Similar to the preceding, except in color, which is pure white. Pkt. 10c.

OUR CHOICE "WILD" GARDEN SEEDS

To those who cannot bestow the necessary care required in a neatly laid out flower garden the "Wild Garden" presents a substitute which for its usual varied effect, for cheapness and small amount of labor necessary for its construction, has no rival.

"**Wild Garden Seeds**" are a mixture of over 100 varieties of hardy flower seeds Pkt. 5c; oz. 20c.

WALL FLOWER

These delightfully fragrant flowers are indispensable for every garden. Height 18 inches.

Early Paris Annual.—Light Brown. Pkt. 5

Blood Red.—A fine strain of single dark red flowers. Pkt. 5c.

Single Mixed.—Pkt. 5c.

ZINNIA

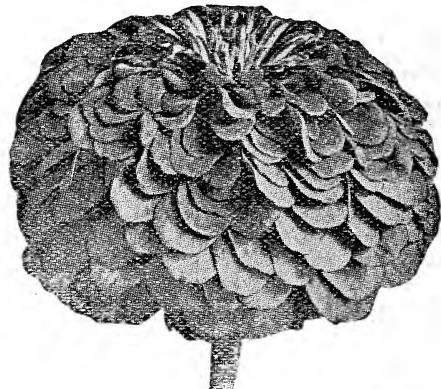
For gorgeous summer and autumn display, there is nothing that can equal in effectiveness the improved compact-growing large-flowering Zinnias; grow only 2 feet high and bear flowers of immense size and of the most brilliant colors.

Elegans Single Mixed.—(Pkt. 5c).

Haageana (Golden Star)—(Pkt. 10c).

Giant White.—Pkt. 10c.

Giant Pure Yellow.—Pkt. 10c.



Zinnia Grandiflora Robusta Plenissima

Giant Rose.—Pkt. 10c.

Giant Scarlet.—Pkt. 10c.

Giant Purple.—Pkt. 10c.

Giant Golden Yellow.—Pkt. 15c.

Giant Pink.—Pkt. 10c.

Giant Mixed.—Pkt. 10c.

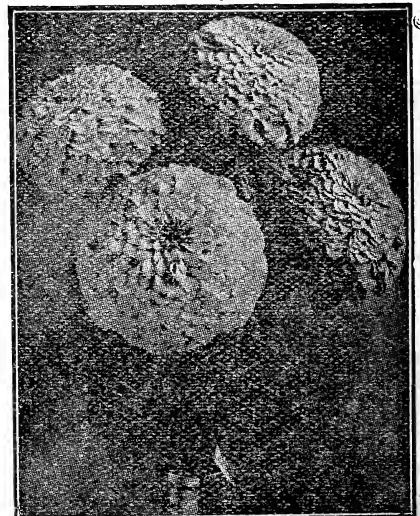
Tall Double Mixed.—The finest strain in cultivation; flowers large, well formed and the colors superb. Pkt. 10c.

Dwarf Double Mixed.—A valuable class only about fifteen inches high, very free blooming; flowers as large as the ordinary double Zinnia. Pkt. 10c.

DOUBLE GIANTS—(Grandiflora Robusta Plenissima)

The largest variety in existence. The blossoms are globe shaped, very large and numerous colors. Plants are taller than other varieties.

Mixed.—Pkt. 10c.



Zinnias

CALENDAR FOR PLANTING FLOWERS

The same cultural instructions that apply to vegetables generally will apply also to flowers.

The following table shows what varieties may be planted each month of the year.

JANUARY Sow Seed	FEBRUARY Sow Seed	MARCH Sow Seed	APRIL Sow Seed	MAY Sow Seed	JUNE Sow Seed
Antirrhinum Centaurea Callopis Celosia Chrysanthemum Salvia Sweet Peas Transplant Carnation Petunia Pansy Stocks Shasta Daisy Verbena Bulbs Anemones Cannas Callas Dahlia Easter Lilles Gladiolus Narcissus Ranunculus	Antirrhinum Asters Callopis Celosia Chrysanthemum Salvia Sweet Peas Transplant Carnation Petunia Pansy Stocks Shasta Daisy Verbena Bulbs Callas Cannas Dahlia Gladiolus Tuberoses	Asters Balsam Centaurea Dianthus Marigold Nasturtium Snap-Dragon Sweet Peas Transplant Zinnia Asters Celastrina Centaurea Callopis Salvia Shasta Daisy Verbena Bulbs Callas Cannas Dahlia Gladiolus Tuberoses	Ageratum Balsam Cosmos Centaurea Coreopsis Celandine Daisies Digitalis Forget-me-nots Poppies Snap-Dragon Sweet Peas Transplant Zinnia Asters Antirrhinum Balsam Centaurea Callopis Salvia Shasta Daisy Verbena Bulbs Amaryllis Canna Dahlia Gladiolus Tuberoses	Carnation Cosmos Coreopsis Candytuft Centaurea Cineraria Daisies Digitalis Forget-me-nots Gillardia Marigold Nasturtium Phlox Petunia Poppies Salpiglossis Scabiosa Transplant Asters Antirrhinum Balsam Centaurea Dianthus Marigold Snap-Dragon Zinnia Bulbs Amaryllis Canna Dahlia Gladiolus Tuberoses	Carnation Cosmos Coreopsis Candytuft Centaurea Cineraria Daisies Digitalis Forget-me-not Gillardia Marigold Nasturtium Phlox Petunia Poppies Salpiglossis Scabiosa Transplant Ageratum Balsam Carnation Cosmos Coreopsis Centaurea Daisies Hollyhock Snap-Dragon Violets Zinnia Bulbs Canna Gladiolus
JULY Sow Seed	AUGUST Sow Seed	SEPTEMBER Sow Seed	OCTOBER Sow Seed	NOVEMBER Sow Seed	DECEMBER Sow Seed
Antirrhinum Canterbury Bells Centaurea Cosmos Lobelia Pansies Stocks Transplant Carnation Cosmos Coreopsis Candytuft Centaurea Daisies Digitalis Forget-me-not Gillardia Marigold Phlox Petunia Salpiglossia Scabiosa Violets	Columbine Calendula Canterbury Bells Cosmos Lobelia Pansies Primula Petunia Verbena Transplant Carnation Canterbury Bells Centaurea Cosmos Coreopsis Candytuft Cineraria Daisies Digitalis Forget-me-not Gillardia Marigold Phlox Petunia Salpiglossia Scabiosa Violets	Carnation Columbine Calendula Cineraria Candytuft Forget-me-not Pansies Stocks Sweet Peas Transplant Antirrhinum Cineraria Calendula Calendula Cosmos Lobelia Pansies Stocks Violets Bulbs Callas Freesias Iris Climbing Vines Australian Pea Cobea Scandens Kudzu Vine Moon Flower Morning Glory Passion Flower Smilax Virginia Creeper	Coreopsis Columbine Calendula Cineraria Forget-me-not Pansies Stocks Sweet Peas Transplant Cineraria Columbine Calendula Cineraria Cosmos Lobelia Pansies Primula Petunia Verbena Bulbs Callas Freesias Iris Anemones Callas Easter Lilles Freesias Hyacinths Iris Narcissus Ranunculus Tulips Bulbs Anemones Callas Easter Lilles Freesias Hyacinths Iris Narcissus Ranunculus Tulips Mignonette may be sown all the year round	Carnation Centaurea Larkspur Pansies Sweet Peas Stocks Transplant Carnation Columbine Calendula Cineraria Forget-me-not Pansies Stocks Bulbs Anemones Callas Easter Lilles Freesias Hyacinths Iris Narcissus Ranunculus Tulip Border Plants Alyssum Ageratum Bellflower Cleome Geranium Shasta Daisy Verbena	Sweet Peas Transplant Coreopsis Centaurea Cineraria Larkspur Pansies Stocks Bulbs Anemones Callas Cannas Easter Lilles Freesias Hyacinth Iris Narcissus Ranunculus Tulip Border Plants Alyssum Ageratum Bellflower Cleome Geranium Shasta Daisy Verbena

The above table is not comprehensive, but suggestive as to what flowers may be planted each month of the year. Everywhere in this book we have endeavored to impart information that may prove valuable to the beginner and the new-comer, and we invite all to write for information on any subject pertaining to gardening, particularly in the vegetable line. See inside of back cover page for information concerning vegetables, what to plant and when to plant it.

Keep this catalogue: you will need it constantly throughout the year. Tell your neighbors to write for one.

For Cut Flowers

Acroclinium	Eschscholtzia	Pansy
Antirrhinum	Gaillardia	Pentstemon
Aquilegia	Geranium	Phlox
Aster	Gladiolus	Poppy
Calendula	Gypsophila	Pyrethrum
Calliopsis	Helianthus	Rhodanthe
Campanula	Hunnemania	Salpiglossis
Centaurea	Larkspur	Scabiosa
Carnation	Lupinus	Stock
Chrysanthemum	Lychins	Sweet Pea
Cereopsis	Marigold	Sweet Rocket
Cosmos	Matricaria	Sweet William
Dahlia	Mimosa	Sweet Sulzaz
Delphinium	Muscari	Verbena
Phlox	Nasturtium	Wallflower

For Shady Places

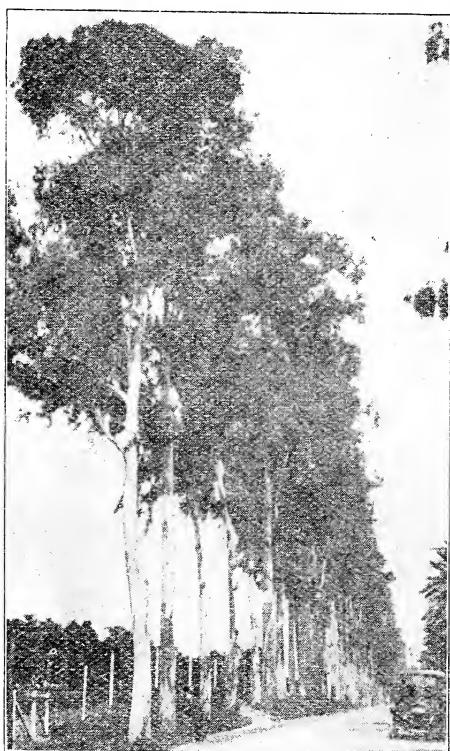
Anagallis	Matricaria
Anemone	Mimulus Moschatus (Musk)
Antirrhinum	Mimulus (Monkey Flower)
Aquilegia	Myosotis (Forget-me-not)
Asperula	Nemophila
Auricula	Pansy
Begonia, tuberosa	Polyanthus
Canterbury Bells	Poppy
Corydalis	Schizanthus
Daisy, Double	Venus
Delphinium	Violet
Flex, Scarlet	
Fragaria	

TREE AND SHRUB SEEDS

Deciduous Tree Seeds should be planted in this section in winter or very early in the spring, as most of these seeds lose their vitality very rapidly. The soil should be well prepared, rich and deep, and the seed should always be sown in drills, and ground kept thoroughly free from weeds. Evergreen tree seeds should be sown in boxes or pans thoroughly well drained, and should be protected from the sun by being placed under the shelter of a hedge or lath house. They are best sown in the spring or fall, and should be carefully transplanted when necessary.

EUCALYPTUS FUTURE TIMBER OF CALIFORNIA

We issue a pamphlet of instructions how to grow the trees from seed. The pamphlet is free to all who are interested in Eucalyptus. All prices on tree seeds are prepaid.



Eucalyptus Globulus

tree; is the king of the stringy-bark varieties.

Robusto (Swamp Mahogany).—Thrives best on low grounds, especially near the coast; is remarkably healthy. Greatly used in this section of the country for avenue planting; height 10 feet. (Pkt. 15c) (oz. 60c) (lb. \$6.00).

Rostrata (Red Gum).—Well known. A rapid grower. It will grow under a great variety of climates. The timber is unsurpassed for durability, and it is used in furniture, vehicles, agricultural implements, manufacturing. Also used for railroad ties, street paving blocks, and ship building; height 200 feet. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Rudis (Desert Gum).—This tree is noted for its toughness, being used as an avenue and wind break, withstanding winds, heat and cold; height 100 feet. (Pkt. 20c) (oz. \$1.00) (lb. \$10.00).

Saligna (Weeping Gum).—Ornamental. Very graceful, drooping variety. Good for fuel; height 75 feet. (Pkt. 20c) (oz. \$1.00).

Tereticornis (Gray Gum).—A rapid grower and erect. Wood durable and useful for shingles, flooring, piles, bridge work and street paving blocks, boat building and wheelwright work under water. This timber will last for ages. It is also good honey producer; height 200 feet. (Pkt. 15c) (oz. 75c) (lb. \$7.50).

Viminalis (Manna Gum).—A hardy, rapid growing variety and well suited to exposed situations (Pkt. 15c) (oz. 75c) (lb. \$7.50).

Citridora (Lemon Scented Gum).—A fine ornamental tree with lemon scented foliage; also its timber is very useful; grows 150 feet high. (Pkt. 15c) (oz. \$1.00).

Corynocalyx (Sugar Gum).—Very ornamental and useful. Highly valued in this vicinity because it stands more drought than any other variety we know of. Timber very durable and is used for railroad ties, telephone poles, etc., height 100 feet. (Pkt. 15c) (oz. \$1.00).

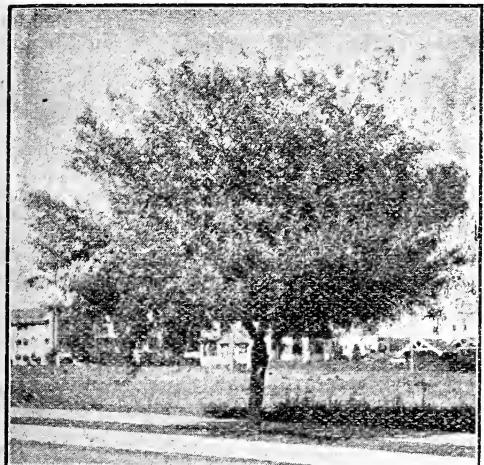
Ficifolia (Scarlet Flowered Gum).—Ornamental, very showy, bright crimson; one of the most effective trees for avenue planting; height 200 feet. (25 seeds, 25c) (100 seeds 75c).

Globulus (Tasmanian Blue Gum).—Well known. One of the most useful of all and a very rapid grower, planted in warm countries on account of its malaria destroying qualities; the wood partakes of a very high polish resembling polished hickory when finished; also valued for wagon work; as for fuel it is one of the best, easily sawed and split; height 150 feet. (Pkt. 15c) (oz. 50c) (lb. \$5.00).

Resinifera (Forest Mahogany).—This wood in grain and finish surpasses South American mahogany, and is one of the most beautiful woods in the world; is used for furniture and many other purposes; becomes in time almost as hard as Iron Bark; (grows to a large, straight (Pkt. 20c) (oz. \$1.00) (lb. \$10.00).

ORNAMENTAL EVERGREEN TREE SEED

ACACIA



Acacia Baileyana

Dealbata (Silver Wattle).—With beautiful silvery foliage; very ornamental for sidewalks and lawn planting; flowers canary yellow, fine for cut flowers, keeps well; height 40 feet. (Pkt. 10c) (oz. 35c) (lb. \$3.50).

Decurrens (Black Wattle).—A medium size tree; very useful for wind breaks; height 30 feet. (Pkt. 10c) (oz. 35c) (lb. \$3.50).

Floribunda.—An abundant bloomer and ornamental; very valuable for lawn, park, sidewalks; height 20 feet. (Pkt. 10c) (oz. 40c) (lb. \$4.00).

Latifolia.—A handsome tree, thrives well along the seacoast; leaves broad, cat-tail yellow flowers; native of South Africa; height 15 feet. (Pkt. 10c) (oz. 40c) (lb. \$4.00).

Lophantha (Crested Wattle).—One of the most rapid growing for first temporary shelter; good for the beach or dry places; height 20 feet. (Pkt. 5c) (oz. 15c) (lb. \$1.25).

Melanoxylon (Blackwood).—A well uniformed tree. Being planted very extensively for sidewalk ornamentals, attaining a height of 50 feet. (Pkt. 10c) (oz. 35c) (lb. \$3.50).

Molissima.—An abundantly blooming tree; very ornamental, suitable for lawns, sidewalks and parks. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Pycantha (Golden Wattle).—Of a drooping habit, rapid grower, well adapted for near the coast; height 25 feet. (Pkt. 10c) (oz. 30c) (lb. \$3.00).

CONIFERA-CEDAR

Cedrus Deodara (Himalayan Cedar).—Exceedingly handsome, with drooping branches and silvery green foliage forming a dense network; the finest, most rapid grower of Cedars and worthy of a place in every garden; height 30 feet. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Libani (Cedar of Lebanon).—A magnificent tree for lawn decoration; height 75 feet. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Cryptomeria Elegans.—A small, dense tree, with glaucous green foliage, changing in autumn to bronzy crimson color, which is retained through the winter. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Japonica (Japan Cedar).—Large, slender tree, with a tapering trunk, covered with a reddish brown bark; thrives under any conditions; height 75 feet. (Pkt. 10c) (oz. 30c) (lb. \$3.00).

Juniperus Virginia (Red Cedar).—A well-known ornamental tree, usually of pyramidal form and having beautiful red heart wood. Its timber has an aromatic fragrance and is very useful; height 60 feet. (Pkt. 10c) (oz. 25c) (lb. \$2.50).

Libocedrus Decurrens (Immense Cedar).—A handsome, compact, growing tree. erect and distinct from any other; with a stout trunk, branches bright, rich, glossy green. Native of California and Oregon; height 75 feet. (Pkt. 10c) (oz. 40c) (lb. \$4.00).

Leptospermum Laevigatum.—This beautiful shrub does particularly well in California, and is very valuable for planting in masses and for filling up odd corners. It grows rapidly, and in the spring is laden with a profusion of white blossoms. (Pkt. 10c) (oz. 40c) (lb. \$4.00).

TREE SEEDS—(Continued)

CYPRESS

Cypressus Lawsonia (*Lawson Cypress*).—A native tree, with elegant, slender drooping branches, leaves dark, glossy green tinged with a glaucous hue; height 75 feet. (Pkt. 10c) (oz. 40c) (lb. \$4.00).

Macrocarpa (*Monterey Cypress*).—A California native, and one of the most desirable of evergreens; extensively used for hedges and wind breaks; height 50 feet. (Pkt. 10c) (oz. 20c) (lb. \$2.00).

Guadelupensis (*Blue Cypress*).—Erect pyramidal grower, with glaucous foliage. Very ornamental for lawn; height 50 feet. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Sempervirens (*Italian Cypress*).—A European variety growing very erect, branches parallel with the trunk; deep green color. Very desirable for cemeteries and arches; height 60 feet. (Pkt. 10c) (oz. 30c) (lb. \$3.00).

Pinus Canariensis (*Canary Island Pine*).—A handsome tree, of robust growth, with bright green foliage; growing almost as rapidly as the Monterey Pine; height 100 feet. (Pkt. 10c) (oz. 35c) (lb. \$3.50),

Insignis (*Monterey Pine*).—A very fine pine; native of California, being particularly well adapted to our coast counties, thriving in almost any kind of soil; height 100 feet. (Pkt. 10c) (oz. 35c) (lb. \$3.50).

Lambertiana (*Sugar Pine*).—The tallest of all California pines, presenting a very attractive appearance when young. Its timber is the most valuable of all our native pines; height 150 feet. (Pkt. 10c) (oz. 35c) (lb. \$3.50).

Sequoia Gigantea (*California Big Tree*).—The largest of all trees, probably the longest lived; rising like a tapering pyramid. The lower branches sweep the ground; an excellent ornamental tree, either for the coast or interior; height 300 feet. (Pkt. 15c) (oz. 75c).

Sempervirens (*California Redwood*).—Well-known throughout the world for its famous redwood timber. Very ornamental and a rapid grower; of tapering pyramidal habit; does remarkably well in any part of California; used for lawns and parks; height 200 feet. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

THUYA, ARBOR VITAE

Thuya Occidentalis (*American Arborvitae*).—A native variety, and commonly known as the White Cedar; used for hedges, etc.; height 50 feet. (Pkt. 10c) (oz. 30c) (lb. \$3.25).

Orientalis Aurea (*Chinese Golden Arborvitae*).—One of the most elegant and popular. Very compact and regular habit, the foliage assuming a beautiful golden tint in spring; height 10 feet. (Pkt. 10c) (oz. 25c) (lb. \$2.50).

Brachychiton Acerifolium (*Scarlet Flowering Tree*).—Of fine, robust growth, with large, handsome foliage, producing masses of scarlet flowers; height 40 feet. (Pkt. 10c) (oz. 30c) (lb. \$3.00).

Camphor Officinalis (*Camphor Tree*).—A symmetrical and ornamental tree, thriving in poor soil; bright green foliage; extensively planted throughout Southern California as an avenue tree, also making a nice ornament for the lawn. This tree is a native of Japan and China. From this tree they extract the camphor of commerce. Attains a height in its native country of 50 feet. (Pkt. 10c) (oz. 25c) (lb. \$2.50).

Grivillea Robusta (*Silk Oak of Australia*).—A well-known shade tree throughout California, with fern-like foliage and flowers of orange color; and of rapid growth; height 75 feet. (Pkt. 10c) (oz. 40c) (lb. \$4.00).

Viburnum Tinis (*Laurustinum*).—A well-known winter flowering shrub of great beauty, producing an abundance of white flowers; well adapted for hedges. (Pkt. 15c) (oz. 25c) (lb. \$2.50).

P. Illicifolia.—“*California Cherry*.” A beautiful native shrub found in most of our foothills. It has pretty, holly-like foliage and small white flowers; very fine for single specimens and also makes a splendid hedge. Fresh seed from November to April. (Pkt. 5c) (oz. 10c) (lb. \$1.00).

P. Integrifolia.—“*Catalina Cherry*.” From Catalina Island. A tree of great beauty, leaves large, oval, rich, glossy green; very pretty as single specimens or as a street tree. Fresh seed from November to April. (Pkt. 10c) (oz. 15c) (lb. \$1.50).

READ THIS CONCERNING EUCALYPTUS

Mr. Wm. Malcolm of Alhambra, Cal., reports having planted on the hills near Puente 2000 trees each of the following varieties of eucalyptus: Tereticornis, Globulus and Corynocalyx. They were watered when planted, but not since, except by the season's rains. After five years the average growth of all is about fifty feet tall. The Tereticornis formed the prettiest and straightest tree; the Globulus showed the most luxuriant growth; the Corynocalyx at the top of the hill with the least moisture averaged up well with the others. All varieties showed an average diameter of four inches five feet above the ground. Mr. Malcolm is well satisfied with this growth.

TREE SEEDS—(Continued)

Hakea Eucalyptoides.—A splendid ornamental evergreen tree, growing some 12 to 20 feet high, with a broad, dense growth having the appearance somewhat of a young Eucalyptus, with a very bushy top. Flowers are of a beautiful shade of pink, and bloom in clusters. (Pkt. 25c) (per 100 seeds \$1.50).

Jacaranda Mimosaeifolia (Brazilian Jacaranda).—A handsome tree with fern-like foliage. Flowers blue or light violet, blooming in clusters early in the summer months. Greatly used as a street tree; very hardy in this vicinity; height 40 feet. Pods containing from 20 to 40 seeds. (5c each) (per doz. 40c).

Ligustrum Japonicum (Japanese Privet).—A very large shrub with glossy dark green, leathery leaves; flowers white, form in clusters, followed by purplish blue berries. A very desirable hedge plant; stands trimming well. (Pkt. 5c) (oz. 15c) (lb. \$1.50).

Magnolia Grandiflora.—A native of the Southern States. One of America's most noble evergreens; foliage is thick, with a nice bright, waxy green; foliage underneath of brown velvet color; flowers of pure white; of immense size and fragrant; height 75 feet. Fresh seed during the fall and winter. (Pkt. 10c) (oz. 35c) (lb. \$3.50).

Pittosporum Eugenoides.—Graceful form, light, bright green foliage. Is suitable for lawns, parks and tall garden hedges; height 20 feet. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Pittosporum Undulatum.—(Pkt. 10c) (oz. 40c) (lb. \$4.00).

Schinus Molle (Mexican Pepper Tree).—This ornamental tree has been one of the greatest attractions of Southwest California, with light feathery foliage and bright scarlet berries during the winter months. (Pkt. 5c) (oz. 10c) (lb. 75c).

Sterculia Diversifolia (Victorian Bottle Tree).—This magnificent street and avenue tree, as its effective and ornamental qualities are becoming established, continues to be in great demand. One great point in its favor is that the roots do not interfere with the pavements of the city streets, and this one fact adds to its charms. Its graceful, tapering habit of trunk and foliage have given it a supremacy over many other trees. Its foliage, which is bright, glossy green, is constantly changing shape. (Pkt. 15c) (oz. 60c) (lb. \$6).

DECIDUOUS

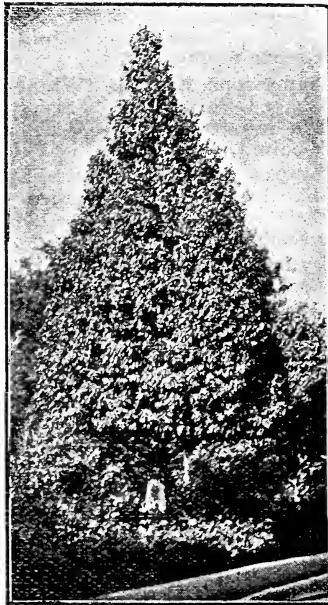
Acer Neugundo (Maple).—Large, fine, spreading tree of rapid growth, foliage ash-like, smaller than in other maples; a fine avenue tree; height 75 feet. (Pkt. 10c) (oz. 35c) (lb. \$3.50).

Catalpa Speciosa (Indian Bean Tree).—Very valuable for forest and ornamental planting; flowers white and purple; height 100 feet. (Pkt. 5c) (oz. 25c) (lb. \$2.50).

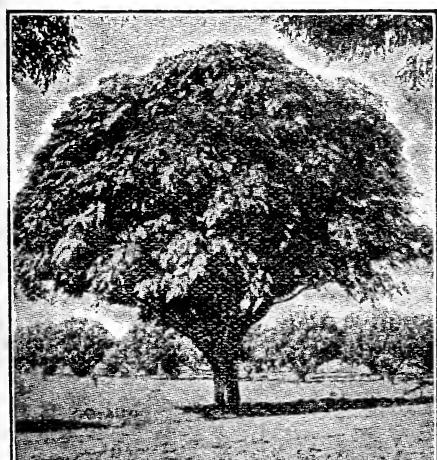
Ceratonia Siliqua (St. John's Bread).—A beautifully formed tree, with yellow flowers and edible saccharine pods which are very healthful; height 30 feet. (Pkt. 5c) (oz. 25c) (lb. \$2.00).

Melia Umbracliformis (Texas Umbrella Tree).—Of a very rapid growth; the top forming in the shape of an umbrella and very dense; greatly recommended for the hot and dry country; height 40 feet. (Pkt. 5c) (oz. 10c) (lb. \$1.00).

Robinia Pseudacacia (Black Locust).—A rapid growing tree with spreading branches; a valuable timber tree; lumber used for various mechanical purposes; flowers white, appearing in spring; height 70 feet. (Pkt. 5c) (oz. 10c) (lb. 75c).



Sterculia Diversifolia



Texas Umbrella Tree

PALMS AND DRACAENA

Areca Lettucens.—Native of the Mascureen Islands. One of the most graceful and beautiful palms in cultivation; the foliage is of a bright glossy green, with rich golden stems; adapted only to greenhouse or house culture. (10 seeds 25c) (100 seeds \$2.00).

Chamaerops Excelsa (Windmill Palm).—Native of China and Japan. Leaves fan-shaped, deeply cut. This is the hardiest palm we have, and although it is not such a rapid grower as some, it makes a fine lawn palm, and an excellent sidewalk palm; height 20 feet. (Pkt. 5c) (oz. 10c) (lb. \$1.00).

Corypha Australia (Australia).—One of the handsomest of the Fan palms; the fan-like leaves are dark green, supported upon brown petioles, which are armed at their edges with stout spines; hardy in Southern California. (10 seeds 10c) (100 seeds 75c).

Erythea Armata (Blue Palm).—Native of Lower California. One of the most exquisite Fan palms and very hardy; a pretty palm, especially suited to small gardens. (10 seeds 20c) (100 seeds \$1.50).

Phoenix Canariensis (Canary Island Palm).—The most graceful and the handsomest of our hardy Palms; leaves pinnate and of a deep, dark green color; one of the most effective palms for a lawn and worthy of the attention of all admirers of the palm family. (10 seeds 10c) (100 seeds 75c).

Phoenix Reclinata (Dwarf Date Palm).—Native of South America; very graceful, drooping leaves; very handsome for avenue or lawn use. Makes a good pot plant. (10 seeds 10c) (100 seeds 75c).

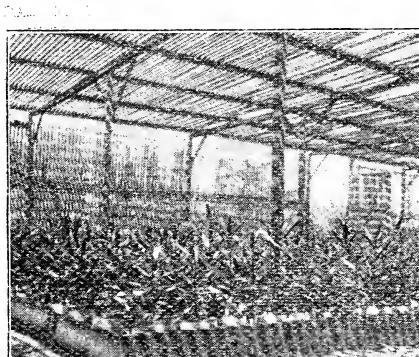
Seaforthia Elegans.—One of the most beautiful and one of the best in cultivation for the conservatory or greenhouse; perfectly hardy in Southern California. (10 seeds 10c) (100 seeds 50c).

Washingtonia Filifera.—The well-known California Fan Palm, which first originated in San Bernardino county; may be seen throughout all Southern California; attains a height of 60 to 80 feet; always a large bunch of leaves hanging close to the trunk. (Pkt. 5c) (oz. 10c) (lb. \$1.00).

Washingtonia Robusta.—This is a very distinct type from the preceding, although the leaves have the same shape and drooping tendency. (Pkt. 5c) (oz. 25c) (lb. \$2.50).

Dracaena Australia.—A palm-like tree with a stout branched stem from 15 to 20 feet in height, with flag-like leaves 2 to 3 feet long. (Pkt. 10c) (oz. 50c) (lb. \$5.00).

Dracaena Indivisa.—A more rapid grower than the preceding, with long, narrow leaves; fine for hall and porch decoration. (Pkt. 10c) (oz. 35c) (lb. \$3.50).



abroad. Price—(Per gallon, \$6.00) (per bushel, \$45.00). Price subject to market change.

Sweet Orange Seed.—California grown.

Price—(Per gallon, \$3.00) (per bushel, \$23.00).

Myrobalan Plum.—Considered the best root stock. Price—(Per lb. \$2.00). Write for quantity price. One pound contains 1000 seeds.

Salway Peach Pits.—Considered good as seedling seed for root stock. Price—(Per lb. 20c prepaid). Write for quantity price.

California Wild Walnut.—The best and hardest. Price—(Per per lb. 25s prepaid). Write for quantity price.

Apricot.—Price per lb. 20c. Write for quantity price.

Apple, Cherry, Pear and Quince.—Write for price.

FRUIT TREE SEEDS

In the climate of Southern California all tree seeds should be sown in soil specially prepared and under the protection of a lath-house. When plants are 3 to 12 inches high, according to variety, transplant to the nursery, 8 or 10 inches apart in rows two feet apart. Peach, plum, apricot and walnut seeds may be planted in the nursery rows, but care should be exercised that only good seed be planted and not too closely. When the young trees are large enough and at the proper season bud to the desired variety. If inexperienced, write for our book on Art of Propagation.

Wild Sour Orange.—We have on hand from January until May fresh seed from

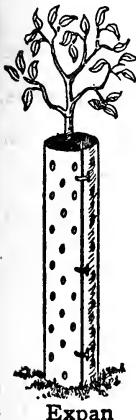
NURSERY REQUISITES

On this page we can only hint at some of the lines we carry, trusting you will, if interested, write and inquire for more information. We carry a full line of Lawn Mowers, Garden Hoes, Pruning Knives, etc. Look to the index to find what you want.

The Expan Protectors

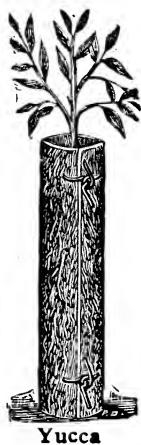
Made of oiled paper, perforated, are waterproof, tough, durable, and easily fastened; do not split or crack; will protect your trees from sunburn, rabbits, squirrels, and tree borers; can be taken off and put on again without injury.

Be sure to state the size and kind you want, and then we can fill your order correctly.



PRICES OF EXPAN PROTECTORS

Oiled Paper Per 1000	Black Per 1000
12 in. 43 lbs. \$ 8.50	12 in. 65 lbs. \$ 7.00
14 in. 50 lbs. 9.75	14 in. 77 lbs. 8.25
18 in. 65 lbs. 10.50	18 in. 100 lbs. 9.00
24 in. 85 lbs. 12.50	24 in. 135 lbs. 11.00



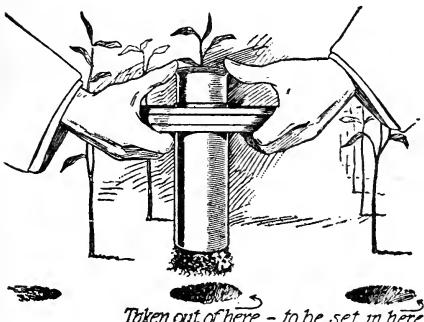
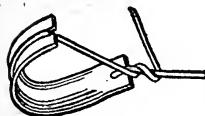
YUCCA TREE PROTECTOR

Just the thing with which to protect the young trees and shrubs from the rays of the hot summer sun, from rabbits and other injury, being cheap and serviceable.

Per 100	Per 1000
30 in. long, 7 in. wide.....	\$2.50
24 in. long, 7 in. wide.....	2.25
18 in. long, 7 in. wide.....	2.00
16 in. long, 7 in. wide.....	1.75
14 in. long, 7 in. wide.....	1.60
12 in. long, 7 in. wide.....	1.50
10 in. long, 7 in. wide.....	1.25
	10.00

THOMPSON'S TREE SUPPORT

Place the supports above projecting branches on the limb to secure them against slipping down. These supports are out of the way of everything. They are perpetual. There is no further expense after putting on.



The proposition is simply to make opposite limbs support each other, or the center limbs to support the outer limbs, thus doing away entirely with the ordinary wooden prop. Price—(Per 100, \$1.50) (1000, \$13.50). Weight 10 to a lb.

TRANSPLANTER

A Transplanter that does the work without disturbing the roots. It first makes the hole where you wish the plant, then picks up the plant, root and all, without disturbing it, and sets the plant into its new location without checking its growth. A child can operate it. Just the thing for Eucalyptus growers and nurserymen. (Price—50c) (by mail 60c).

GRAFTING WAX. Price—($\frac{1}{4}$ lb. 20c) ($\frac{1}{2}$ lb. 30c) (1b. 40c). Prepaid.

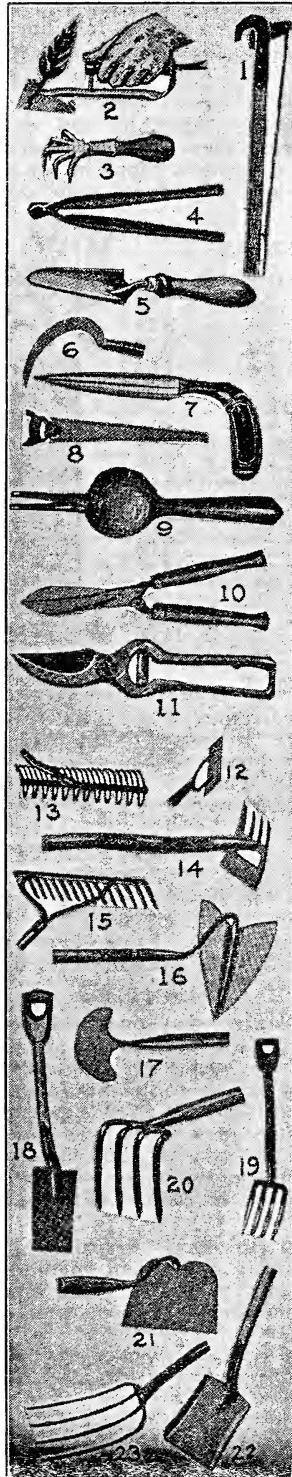
Mr. Reeves of La Mirada is authority for the following convenient method of handling grafting wax. Melt the wax in a one-gallon lard bucket; suspend it in a five-gallon can of hot water. You are then ready for work, and your wax will remain pliable for half a day.

Look over our list of Poultry Samples and see the list of books we have on Agriculture and Poultry. You may see something you want. Keep the egg record, it is valuable.

Send 30c for "The Art of Propagation." It is valuable. See pages 133 to 136.

Look over our list of sprayers. It is complete. You will find what you want. See also our pages of insecticides, 136 to 139.

The following is only a partial list of the small tools we have on hand. Ask for anything you want.



Flower Pots—(2 in. 20c doz.) (3 in. 30c doz.) (4 in. 45c doz.) (5 in. 60c doz.) (6 in. 75c doz.) (7 in. \$1.00 doz.) (8 in. \$1.25 doz.).

Hanging Baskets (Clay)—(7 in. 15c each) (8 in. 25c) (10 in. 65c) (14 in. \$1.50).

Wire Hanging Baskets—(10 in. 25c) (12 in. 35c). Wire Wall Pockets—(10 in. 35c) (12 in. 45c).

Green Moss—(Per bale \$2.00).

Budding Twine—(Per ball 20c). Postpaid 25c.

Budding Cloth—(Per square yard 50c, prepaid).

Raffia—(Per lb. 20c) (10 lbs. \$1.50).

Balling Twine—(5-lb. ball 75c).

Balling Spades—\$1.75.

Ladies' Garden Sets—Made of best material. (Per set \$1.25).

Axes—Best forged axe at \$1.25 each. Axe handles, good quality, 25c; best quality, 50c.

Lawn Mowers—(Prices \$2.50 to \$15.00). Write for particulars.

Garden Hose—Write for particulars and prices.

Vine Pruner—Just the tool to trim blackberry, raspberry, dewberry and loganberry vines. No scratched hands. You cannot do the work well without this tool. Price, \$1.00.

Plant Stakes, Square, Painted Green—

2 feet....35c per dozen	4 inch....15c per 100
3 feet....50c per dozen	5 inch....20c per 100
4 feet....75c per dozen	6 inch....25c per 100

Copper Wire Labels—

3½ inch, 25c per 100; \$1.75 per 1000.

Garden Tools—See Picture

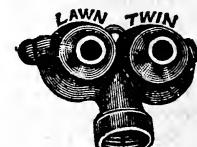
- No. 1. Water's Tree Pruner, 4 to 10 ft., 75c to \$1.25.
- No. 2. Pond's Handy Garden Tool 35c, by mail 45c.
- No. 3. Excelsior Weeder 10c, by mail 15c.
- No. 4. Tree Pruner, all sorts, from 75c to \$3.00.
- No. 5. Garden Trowels, all sorts, from 5c to 50c.
- No. 6. Grass Hooks, or Sickles, 40c, 50c and 60c.
- No. 7. Dibble 50c, by mail 60c.
- No. 8. Pruning Saws, double and single edge, \$1.00.
- No. 9. Havil's Weeder 35c, by mail 45c.
- No. 10. Hedge Pruners, \$1.75 to \$2.25 each.
- No. 11. Pruning Shears, from 35c to \$2.50 each.
- No. 12. Scuffle Hoe, 7-in. 60c, 12-in. \$1.00.
- No. 13. Ohio Wire Rake 60c.
- No. 14. Hoe and Rake combined 50c.
- No. 15. All Steel Rake, 50c and 60c each.
- No. 16. Warren Hoe 75c.
- No. 17. Turf Edger 75c.
- No. 18. Steel Spade \$1.00.
- No. 19. Spading Fork, \$1.00 to \$1.25.
- No. 20. Potato Hook, 75c to \$1.25.
- No. 21. Garden Hoes, from 4 to 10 in., 35c to \$1.00.
- No. 22. Steel Shovel, 75c to \$1.25 each.
- No. 23. Manure Fork 75c, Hay Fork \$1.00.

LAWN SPRINKLERS

We have almost every kind of Sprinkler that has ever been offered. Prices vary from 20c to \$1.50.

Twin Sprinkler—Price, postpaid, 35c.

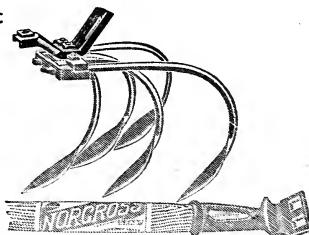
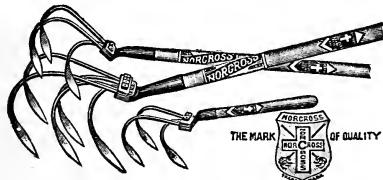
Rose Sprinkler 50c; postpaid 60c.



Twin Sprinkler

All on This Page May Be Sent by Parcel Post

The "NORCROSS" Midget Weeder is constructed along the same lines as our Cultivator-Hoes. It has a 9-inch handle and is designed for use in flowers, small shrubbery, etc., or for cultivating any sort of vegetation where the use of a long handle tool would be less practical. Excellent in strawberries and all low-growing plants where tedious hand cultivation is required. Price 50c.; postpaid 60c.

Norcross Tools May Be Sent by Parcel Post Without Handles for 25c Extra

The "NORCROSS" 3-prong Cultivator-Hoe is a modification in size, weight and price of our well-known 5-prong tool. It has same length handle (of smaller size), three prongs (instead of five) and weighs only 2 pounds complete. Price 75c.

The "NORCROSS" 5-prong Cultivator-Hoe is constructed similar to the 3-prong tool, except it has five prongs, which is often desired in garden work. Price \$1.00.

All of the "NORCROSS" Cultivator-Hoes are constructed that the handle may be removed and the tool attached to any hand cultivator. (See cut.)

POWDER SPRAYERS

For house plants use
this blower.



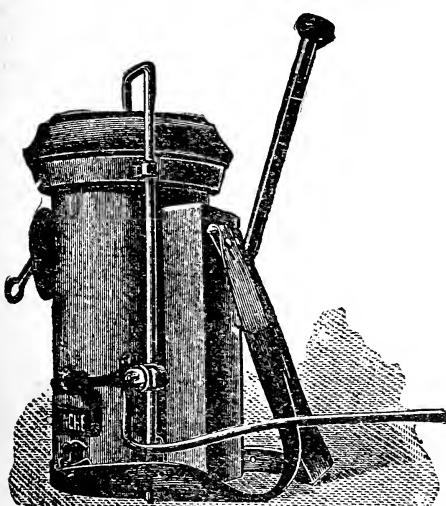
Powder Blower

Price 25c; by mail 30c

Sulphur Duster

Price 60c; by mail 70c

Small size 60c; large size \$1.50;
by mail add 20c.

THE VERMOREL "TORPILLE" SULPHURING MACHINE

Without any doubt the Vermorel Sulphur Duster is the most effective machine manufactured. It has been manufactured for the last thirty years in France by its inventor, Mr. Vermorel. It has a carrying capacity of 15 pounds; it distributes the weight on the shoulders and back, leaving the hands of the man operating the machine free to work the pump and open up the vines.

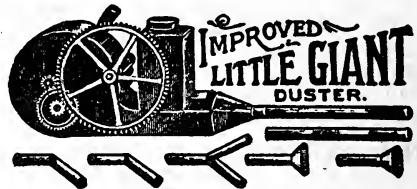
It is quite necessary to see the machine at work to realize how fine a mist it can produce. The sulphur, violently projected by a powerful bellows, sends out of the paddle-shaped nozzle, which can be directed at will, dust as fine as mist, thus producing highest efficiency with least sulphur.

The machine weighs eleven pounds, and is usually shipped in closed case, bringing the shipping weight to eighteen pounds.

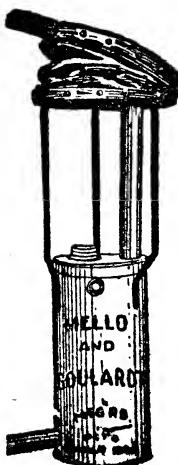
Hundreds of them are now in use on this coast. The Italian vineyard of 4000 acres has sixty of them; they have no other, which confirms the claims we make regarding the saving of sulphur and labor and the efficiency of the work done. Price \$18.00. Weight 10 pounds.

LITTLE GIANT DUSTER

The best dry powder gun; will distribute any dry insecticides and fungicides. Will do as much work in a day as a horse-power sprayer. Dusts two rows at once. Price \$10.00; packed weight, 15 lbs.



Macabee



Eureka Squirrel
Exterminators



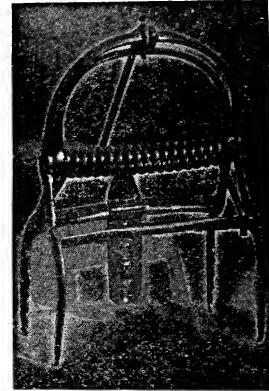
Easy-Set Mole Trap

OUT-O-SIGHT MOLE TRAP

Mole Trap.—It is the best that has been patented. If properly placed over the runway it is sure to catch the mole, no matter which direction he travels. Louie Dick, a Chinaman, reported five moles the first week he had it. He says it has never failed to catch. Price—75c, by mail \$1.00.

Macabee Gopher Trap.—This is the most convenient gopher trap yet put on the market. It is easy to set, and being small, it can be extended far down into the hole.

Box Trap. Price—25c, by mail 35c. You never fail to get your gopher when two traps are set in the opposite directions in the main run. Price—20c, by mail 30c.



Out-O-Sight Mole Trap

EUREKA SQUIRREL EXTERMINATOR.—With the use of Carbon Bi-Sulphide this is the best and cheapest implement with which to eradicate the squirrel pests on your land. We can confidently recommend the use of this machine in vineyards, orchards, grain fields, pasture lands, etc. It is of simple construction, best galvanized sheet steel with a bellows attached. The working of the bellows causes the Bi-Sulphide in the machine to generate a gas which is forced through the hole or holes, not forcing in any liquid, but simply a gas from Bi-Sulphide, thus saving 75 per cent of the Carbon Bi-Sulphide bill over the old way of saturating balls of old rags or cotton. A colony of squirrels can soon destroy \$50 worth of vegetation. Six dollars expended for this Exterminator will destroy all the squirrels about your place. Price \$6.00. Weight crated, 12 lbs.

GOPHER SMOKER

Does the work of exterminating all your gophers and squirrels with no expense but your time and labor. Send for illustrated circular describing its operation. Price \$10.00. Wt, 24 lbs., crated.



Easy Set Mole Trap catches them going and coming. A child can set it with perfect safety. Price 75c; prepaid \$1.00.

Steel Jaw Traps, all sizes. Price 20c to \$1.00. When ordering state what game you wish to catch.

CARBON BI-SULPHIDE—Price—(1 gal. \$1.50) (5-gal. can \$6.00).

MOORE'S SQUIRREL POISON—Price—(1 lb. can 35c, by mail 45c).

RAT-MUM.—Is sure death to rats. Prepared in cakes, of which the rats are very fond, and eat it readily, but cats and dogs will not eat it. Price—(Per cake 25c, postpaid).

Gopher Smoker

A & M SQUIRREL AND GOPHER POISON is relished by all kinds of rodents, and is sure death to them. For gophers drop a tablespoonful into a freshly opened hole. For squirrels put a cupful on a board near the hole and cover it with brush. Price—(Per $\frac{1}{2}$ lb. can, 35c) (1 lb. can 60c) (5 lb. can \$1.45). Prepaid.

GOPHERGO

KILLS GOPHERS



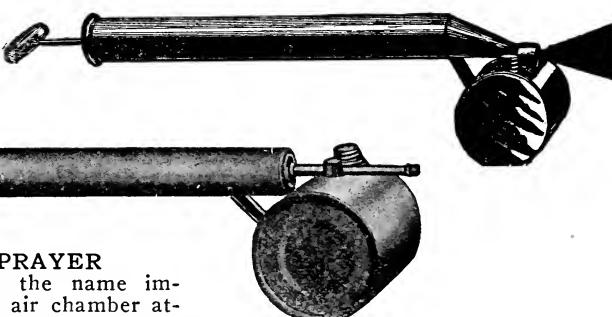
FOR SALE BY

Holds 1 quart. Weight
crated, 3 lbs.

Price 50c, 60c prepaid

Little Midget holds $\frac{1}{2}$
pint; is just the sprayer
for home use. Price 35c,
40c prepaid.

THE FAULTLESS SPRAYER



CONTINUOUS SPRAYER

This atomizer is what the name implies, by means of a small air chamber attached there is sufficient pressure to keep the spray continuous while the operator is making the back stroke of the arm, during which time other atomizers are at rest. Price 75c; prepaid \$1.00.

Continuous Sprayer.—Brass. Price
\$1.00. Prepaid \$1.25.

"PERFECTION" COMPRESSED AIR SPRAYER

Built on the best lines, of high grade material and with the idea of turning out a sprayer which has none of the faults and defects so common in many Knapsack sprayers heretofore on the market.

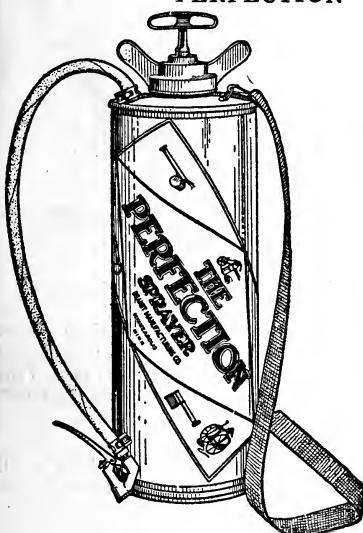
The tanks are made of heavier metal than has ever been used in sprayers of this kind, making the tank practically unbreakable. The pump is $1\frac{3}{4}$ -inch seamless brass tubing with a brass valve, and is sealed into the top of the tank with heavy threads following the construction used in the best makes of fire extinguishers.

This Sprayer will handle Whitewash, Water Paints, Bordeaux Mixtures, etc., perfectly.

For whitewash and all heavy mixtures it is necessary to use a "W. W." Cap in nozzle, which is furnished with sprayers.

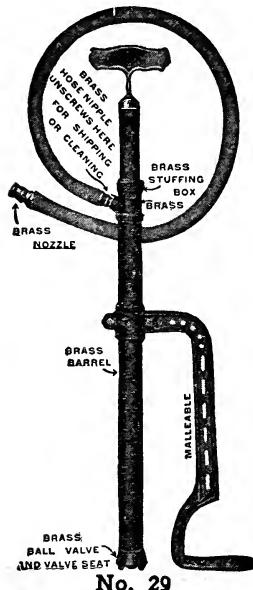
These sprayers are made in galvanized steel or brass as ordered. Weight, 9 pounds empty. All sprayers tested to 60 pounds before leaving factory.

Galvanized Steel	\$5.75
All Brass	\$6.75



GOPHERGO

Gophergo is sure to kill all rodents, easy to use, cheap and will kill gophers where traps and other devices fail. All experienced gopher fighters find poisoning the best method, but it must combine three points: Something that they will eat, it must be thoroughly poisoned, must be placed where they will get it. Gophergo does it. Try it. It is sold in $\frac{1}{2}$ lb. cans (25c, by mail 35c) (1 lb. 50c, by mail 65c). Sold in larger cans at \$3.00, which may be sent by Parcel Post for 40c additional within 150 miles.



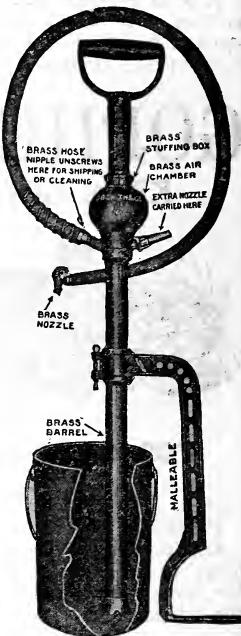
Bordeaux Nozzle

DIAMOND BUCKET SPRAY PUMP NO. 32

Diamond Spray Pump.—A pump that will spray whitewash or any other mixture. Made of solid brass, no leather valves to wear out or be eaten up by the whitewash. Throws a continuous spray and is so simple that a child can take it apart. The Pump shown on this page is almost entirely of the best grade of brass, hence it cannot be affected by the action of the whitewash or of any ordinary spraying solution. It is fitted with a Bordeaux Nozzle. Altogether it is the most durable and serviceable bucket pump made. Price, \$5.00 each.

DIAMOND BUCKET SPRAY PUMP NO. 29

This pump is provided with large double air chamber, enabling the operator to keep a constant pressure on the nozzle of from 50 to 100 pounds with very little exertion. Rapid pumping is not necessary. Used largely for spraying trees, shrubbery, vegetables, as well as for whitewashing, spraying disinfectants, washing wagons, windows, etc. Price \$3.50.



No. 32

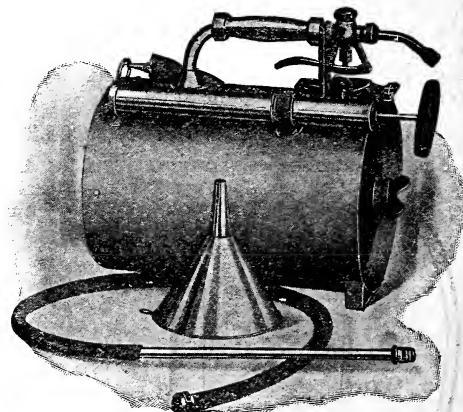
BORDEAUX NOZZLE

For Bordeaux Mixture and Whitewash. It cleans itself by reversing the aperture. Price 75c, postpaid 85c.



Lowell Sprayer in Operation.

liquid and pump air into it with all the pressure you can control. It is then ready to operate. One great merit of the sprayer is that the value of the pump does not come in contact with the liquid which is the great weakness of other sprayers. This is absolutely the best sprayer yet offered. Price without curved rod extension, \$6.00. Brass Tank, \$7.50. Price of curved extension, \$1.00. Weight crated 20 lbs.

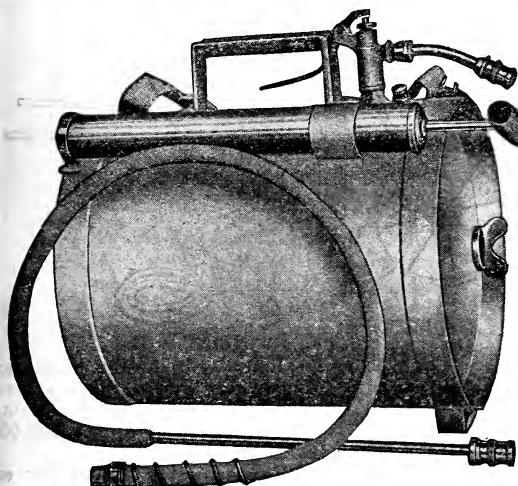


Lowell Compressed Air Sprayer

BORDEAUX MIXTURE

Too much credit cannot be given to the merits of Bordeaux Mixture. Use it all the time and on all occasions, where blight results from fungus or microscopic insects. It is a good tonic for all sick plants.

Price—(Per 1 qt. can 50c) (prepaid within 150 miles 75c).



Tank holds four gallons.
Furnished Complete as Shown.

THE BLIZZARD COMPRESSED AIR SPRAYER

The "Blizzard" Compressed Air Sprayer is made of heavy galvanized Steel (also made in brass). Tank heads are double seamed and riveted. Tested to stand a heavy pressure of air; one pumping will spray out the entire contents. The sprayer may be carried in the hand or suspended from the shoulder, and is operated by simply pressing the lever of the automatic shut-off, and by so doing an instantaneous spray is produced. By releasing the lever, the shut-off closes instantly, preventing waste of liquids.

Price—Galvanized iron, \$6.00.
Brass \$7.50. Weight crated
20 lbs.

THE NO. 40 "BEST" BARREL SPRAY PUMP

Made With Brass Nozzles, Brass Cylinder, Brass Ball Valves and Valve Seats

Dimensions—Height over all, 43 ins.; boiler tubing, air chamber, diameter, 3 ins.; length, 32 ins.; cylinder diameter, 2½ ins.

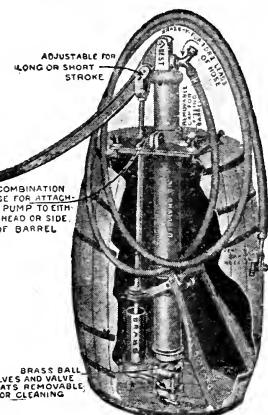
The Plunger Packing is a specially prepared, treated canvas, that is proof against the ruinous effects of strong mixtures, which would destroy a leather packing. The brass cylinder and all valves and valve seats are made of the best brass, ground together so that all parts are air-tight. These parts will not corrode nor rust.

By removing two bolts, the valves are accessible, making it easy to quickly clean pump when necessary.

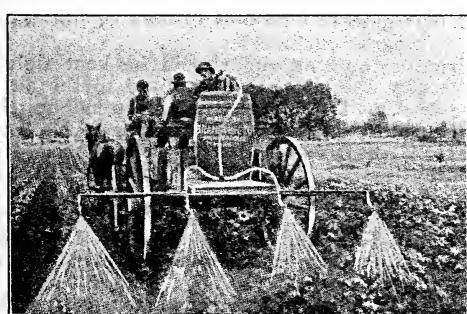
All parts are submerged in the liquid, and therefore no priming is necessary.

Pump has duplex agitator which keeps the liquids thoroughly mixed. The air chamber is exceptionally large, making it easy to produce sufficient pressure for a continuous spray of great force with slow pumping. The stroke of the lever handle may be changed by simply removing and replacing a single bolt, thus varying the pump's capacity.

Price, complete, without barrel, \$17.00.



No. 40—"Best" Spray Pump, Complete With Agitator, 15 Ft. Hose and Vermorel Nozzle



Wagon Spray Boom

The ever increasing inroads of insects and disease has rendered it necessary to get adequate sprayers to meet this necessity. Call and see our assortment; it is complete.

WAGON SPRAY BOOM

WAGON SPRAY BOOM—PRICE, \$10.00.

This boom can be used with any good barrel pump, but gives the best satisfaction in connection with our No. 25 or No. 40. It is light, strong and adjustable to every position. Will throw spray at any angle and can be folded so that you can drive through narrow gates and can be set to spray between rows of grape vines, etc., two nozzles spraying to the right and two to the left. One barrel of liquid will cover three acres. A ten year old boy can operate it. The cheapest and best method of spraying a field of potatoes, celery, etc.

"IDEAL" SPRAYING OUTFIT

This outfit has been designed to fill the requirements of the small gardener and fruit grower. It is light, compact and easy to operate. The tank holds fifteen gallons, is mounted so that the liquid will not slop or spill, and in a way that makes it easy to handle. The pump spreads across the top of the tank and is held firmly in place by a thumb nut. It has the largest air chamber of any spray pump of corresponding size. This enables the operator to keep a uniform pressure at the nozzle. The pump barrel is $1\frac{3}{4}$ inches in diameter, 7 inches in length. The valves are bronze balls $\frac{5}{8}$ inches in diameter which allows free passage for the liquids and prevents clogging. Both valves are removable. A pressure of one hundred and fifty pounds can easily be maintained. A mechanical agitator keeps the liquid well stirred. Price complete, \$20.00.

THE PUMP HAS THE FOLLOWING EQUIPMENT

Ten Feet $\frac{3}{8}$ -inch Pressure Hose

Ten Feet Pipe Extension, in Three Pieces

One "IDEAL" Nozzle

One Brass Shut-off Cock

THE NO. 25 "YANKEE" BARREL SPRAY PUMP

Made With Brass Nozzles, Brass Cylinder, Brass Ball Valves and Valve Seats

Quickly Attached to Any Barrel

The No. 25 "Yankee" double acting barrel spray pump for use with a barrel spraying outfit. All parts are submerged in the liquid, and therefore no priming is necessary.

The suction barrel is made of heavy brass, and all valves and valve seats are made of the best brass, ground together so that all parts are absolutely air-tight. These parts will not corrode or rust out, nor is any part of the pump affected by the strong mixtures.

The duplex agitator keeps the liquid stirred up and prevents the ingredients from settling to the bottom. The pump is regularly fitted with 5 feet of $\frac{1}{2}$ -inch 3-ply rubber hose of A-1 quality, and Vermorel Brass Nozzle, from which any size spray or stream can be thrown. It is impossible to clog this nozzle, and it cannot get out of order.

Only very slow and easy pumping is necessary. The "Yankee" is used extensively for all spraying purposes, especially for orchards, vineyards, shrubbery, and for whitewashing hen houses, stables, fences, etc.

Price, complete, without barrel, \$11.00.

SPRA-SULPHUR

A dry soluble sulphur compound.

Spra-Sulphur is a granular compound that quickly dissolves in cold or hot water—stays in solution—leaves no sediment to clog or cut nozzle.

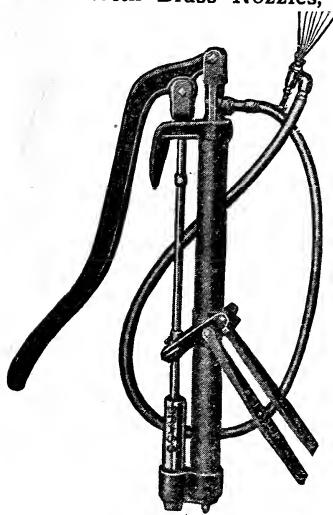
Spra-Sulphur is packed in airtight, friction-top tins and should be kept tightly covered until ready to use, as it is so readily soluble that if exposed to the air it will attract sufficient moisture to dissolve it. But if kept sealed will keep indefinitely.

Spra-Sulphur is a superior and efficient form of sulphur for destroying SAN JOSE and other SCALE INSECTS and all FUNGUS Diseases that can be controlled in the dormant season, and as a Summer Spray for APPLE SCAB, APHIS LARVAE, MILDEW and other Fungus troubles.

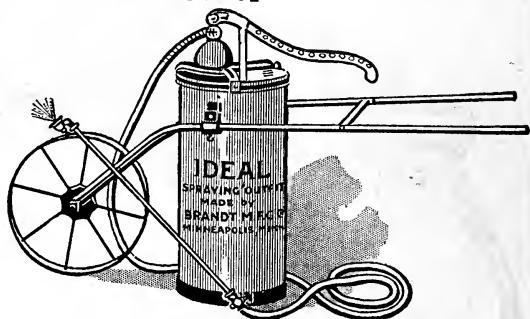
Directions.—For Winter Spraying when trees are dormant, use 10 pounds Spra-Sulphur to 50 gallons of water. For control of Scale and fungus diseases. For Summer Spraying when trees are in leaf, to control Apple Scab, Aphid Larvae, Mildew, etc., use 1 pound to 50 gallons of water.

When Arsenate of Lead is added for codling moth and all chewing insects, make your sulphur solution first, then add Arsenate of Lead, using 2 pounds of the paste, or $\frac{3}{4}$ pound dry, to the 50 gallons solution.

Price—(1 lb. 45c prepaid) (10 lbs. \$2.50) (25 lbs. \$4.00) f. o. b. Los Angeles.



No. 25
Spray Pump Complete



Ideal Spraying Outfit

INSECTICIDES

On pages 137 to 139 we are offering twenty-one different insecticides. Surely here is a remedy for every disease known to plant life, if you will but apply the proper remedy thoroughly and intelligently.

Disease of garden crops are numerous and cause large financial losses every year. BORDEAUX MIXTURE is the most important material yet discovered for the prevention and control of such diseases. Use it for all fungus and microscopic insects. If the plant is infested with bugs or worms, together with any fungus disease, add Paris Green at the rate of $\frac{1}{2}$ lb. to fifty gallons of water, or one tablespoonful to five gallons. Arsenate of lead may be used instead of Paris Green, at the rate of three pounds to fifty gallons of water.

NONPAREIL TREE WASH FOR SCALE OF EVERY DESCRIPTION

After carefully investigating NONPAREIL TREE WASH we have concluded that it is all the manufacturers claim for it; we therefore give it our full endorsement.

The citrus growers are awakening to the fact that the pests infesting their trees are seriously affecting the coming crops. A great deal of money has been spent during the past in trying different insecticides and fumigation, but the fact remains that the majority of the trees have insects and are more or less black with smut. An unclean tree, infested with insects that are sapping the life from the leaves and branches and thereby causing the tree to make strong efforts to ward off their effects, leaves the tree in such a weakened condition that it is more easily affected by frost and produces less and poorer fruit.

After years of experimenting on different orchards with different materials and compounds, and carefully observing their effects, the manufacturers have perfected and adopted a spray that is now proving very satisfactory and superior to anything else now on the market. It has been conclusively proven in many orchards that all classes of scale, black, red, soft gray, purple, etc., are killed in all stages of life, from eggs to full grown, consequently any tree that may have the red spider and any or all of the known scale, if thoroughly sprayed with Nonpareil, will be entirely cleaned of the pests. The honey dew and smut caused by the insects is immediately loosened from the leaves, branches and fruit, thereby causing the tree to take on new vitality and the fruit easily cleaned when harvested.

- After an orchard has been thoroughly cleaned, one spraying each year will keep it clean and in first-class condition. Dilute ten parts water to one of Nonpareil, when the scale are in the egg state. When they pass this state, dilute from ten to sixteen parts water. On roses and house plants use six to eight per cent Nonpareil.

One gallon, 75c.

Five gallons, crated for shipping, \$2.50.

Ten gallons, crated for shipping, \$4.00.

Fifty-gallon barrel, \$8.00.

Delivered to the Freight or Express Depot, Los Angeles. We will refund \$1.50 for each barrel returned to us at Los Angeles.

For reference we give the names of

Mr. John Scott of La Habra, Cal.

O. W. Mosby, Whittier, Cal.

C. H. Vaught, Whittier, Cal.

Mr. Fred J. Hart of Porterville says in a letter to the manufacturer of this spray, "The inspector here is a spray booster, says he don't know what is the matter with the spray down South, but it sure does the work here."

Here is another:

November 11, 1914.

Gentlemen: Regarding the spray which we purchased from you for our 20-acre orange ranch at Placentia,--we want to say it has turned out absolutely satisfactory. We are unable to find a single live scale, and believe me, we had some scale, both Black and Red.

We find the cost was about half what it would have cost us to fumigate. Our entire cost, hiring all labor and machine, was \$229.50 against \$425 to fumigate.

Our trees have cleaned off much sooner and started to throw a growth within two weeks.

We feels that we can recommend your spray, for it is the only spray we have ever seen that would do the work and not mark the fruit.

Wishing you much success, we are;

Very truly yours,
FOOTHILL ORCHARDS COMPANY,
By A. J. Wilson.

INSECTICIDES FOR THE VEGETABLE GARDEN

Plant	Injury	Cause	Remedy or Preventive	Name
Asparagus	Shoots eaten	Beetle and Grub	Use Paris Green	Asparagus beetle
Asparagus	Shoots rusted	Rust	Sulphur	Asparagus rust
Bean	Leaves eaten	Grub	Paris Green	Bean beetle
Bean	Leaves and pods spotted	Plant Disease	Bordeaux	Anthracnose
Beet	Leaves spotted	Plant Disease	Sulphur Powder Bordeaux	Leaf-Spot
Cabbage	Leaves lousy	Plant Lice	Blackleaf 40	Cabbage Aphis
Celery	Yellowish	Fungus	Bordeaux	Celery Blight
Cucumber	Gnawed leaves	Small beetle		Striped Beetle
Cucumber	Lousy tips	Aphis	Blackleaf 40	Aphis
Cucumber	Mildew	Fungus	Bordeaux	Downy Mildew
Potato	Black leaves	Blight Disease	Bordeaux	Potato Blight
Potato	Scabby	Scab	Formaldehyde	Potato Scab
Squash	Mildew leaves	Fungus	Sulphur	Mildew
Squash	Lousy tips	Plant Lice	Blackleaf 40	Aphis
Tomato	Black leaves	Plant Disease	Bordeaux	Tomato Blight

Liquids May Be Sent by Mail

Nikoteen (Liquid).—30 per cent strength for spraying, strongest, purest and most economical. Death to Aphis or Green Fly, Red Spider, Mealy Bug, Thrip and many other forms of Flower, Fruit and Vegetable Lice. An extract of tobacco, containing about 30 per cent nicotine. A most effectual, economical and safe remedy for fumigating greenhouses. Use a scant teaspoonful to 1½ pints of water for each pan, which is sufficient, when vaporized by placing a hot iron in it, for 600 square feet of floor space. Price—(Pint bottle, \$1.50; prepaid, \$1.75).

Kerosene Emulsion (Liquid).—Prepared according to the most improved formulae; ready for use by simply adding water (25 to 50 parts water to one of Emulsion) for cabbage worm, scale on trees, caterpillars, melon louse, rose bugs, green fly and lice of all kinds, all sucking insects, either on plants or animals. Price—(Per gallon, 50c).

Bordeaux Mixture (Paste).—The great preventive of mildew wherever it may appear. Sure preventive of blight on tomatoes, potatoes and celery. It is death to any fungus growth. It is a sure preventive, but do not expect it to eradicate where once the disease is established. One quart diluted to twelve gallons of water. Price—(1 qt. can 50c; prepaid 150 miles 75c).

Paris Green (Powder).—Sure death to all insects that eat the foliage. One ounce to five gallons water well mixed. Price—(1 lb. box 50c; prepaid 60c).

Bug Death (Powder).—Apply to roses and all plants attacked by slugs. It is sure death to cut-worms, etc. Price—(1 lb. 20c; prepaid 35c).

Ant Powder.—To drive ants out of your garden or plant beds; particularly effective in large Eucalyptus seed beds, and absolutely harmless to the young plants. For hot beds we give it special recommendations. It will eradicate all insects. Price—(Per lb. 30c prepaid).

Hellebore (Powder).—For insects on currants, vines, shrubs and on all plants where it is safe to apply poison. It is a powder put up in ½-lb. boxes. Price—(Per box 35c prepaid).

Arsenate of Lead (Paste).—A poison to destroy insects that eat the foliage. Do not apply where there is any danger that the poison may be eaten by any person or stock. Dilute three pounds arsenate of lead to fifty gallons of water. Price—(Per 1-lb. can 35c prepaid).

CREOLIUM (Liquid)

Creolium, Anti-Toxin, Non-Poisonous, Antiseptic, Germicide, Insecticide, Deodorizer, Disinfectant. Plant insecticide and fungicide directions:

For Aphis, Thrips, Red Spider, Caterpillars, etc., on soft fresh growth dilute with 99 parts of soft water.

For mildew on rose bushes, dilute with 75 parts water.

For scale insects on orange trees and all other firm growths, dilute with 45 parts water.

Poultrymen can make a solution for 5 cents per gallon by adding one gallon CREOLIUM to fifty gallons water. Price—(½ pt. can 35c; 1 qt. can \$1.00).



STERLINGWORTH CUT WORM KILLER

Birds and fowls that eat the dead cut worms are not killed. One pound protects 175 plants in hills, and 150 lineal feet when in rows. Read carefully the directions. Prices—1 lb. box 25c; 5 lb. tins. \$1.00; 25 lb. drums \$4.00.

Whale Oil Soap, small size can, by mail 15c.
Kill-Sure Soap, 2-lb. piece, by mail 30c.

Hammond's Slug-Shot for bugs and worms of every description. Price—(Per lb. 25c) (5 lbs. 85c). Prepaid.

Hammond's Copper Solution for mildew, blight and rust, to be diluted to 100 parts water and sprayed. Price—(Per 1 qt. can \$1.00; prepaid \$1.25).

Hammond's American Sheep Wash. Price—(Per 1 qt. can 75c; prepaid \$1.00).

Talbot's Ant Exterminator (Powder).—Sure death to ants of every description wherever they appear. We give it special recommendation for seed beds, but it is equally meritorious in destroying ants under all conditions. It is non-poisonous, and may be used in the home with absolute safety. Price—(Per pkg. 30c, prepaid).

"BLACK LEAF 40" SULPHATE OF NICOTINE

A liquid sold in tine cans of the following sizes—(½-lb. \$1.00, 2 lbs. \$3.00, 10 lbs. \$12.50; prepaid, 10c per lb. additional).

Diluted according to directions it is non-poisonous, and may be safely applied to all kinds of vegetation, for the purpose of destroying aphis and thrip wherever they may appear, or it may be used as a wash for animals affected with skin diseases. It is also the best spray for chicken houses. Dilute ½-lb. can to forty gallons of water, adding ½-lb. of Kilsure soap.

"NICO-FUME" LIQUID, NICOTINE SOLUTION

For spraying, two teaspoonfuls to the gallon of water. For fumigating, vaporize ½ ounce to 2000 cubic feet of space. It is sure death to aphis and thrip. Sold in tins ¼ lb. each. (Price, prepaid 60c).

"NICO-FUME" PAPER

Sold in tins containing 24 sheets of paper. One sheet is sufficient to fumigate 100 square feet. It is an easy way to clean greenhouses and hotbeds of aphis and thrip, or chicken houses of mites. Directions are printed on each can. Price—(Per tin \$1.00; prepaid \$1.10).

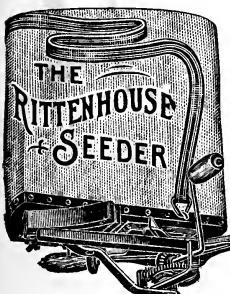
Tobacco Stems for fumigating greenhouses, 75c per sack.

Tobacco Dust for Aphis and preventive for insects under ground and about the roots of plants. Price—(Per lb. 25c, prepaid).

Sulpho-Tobacco Soap.—Used as a spray. One small bar dissolved in one and one-half gallons warm water will destroy all insect life on animals or plants. Price—(Per small bar 10c; by mail 15c) (large size 25c; by mail 30c).

FARM AND GARDEN TOOLS

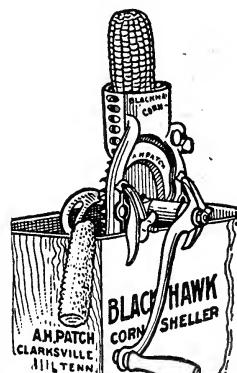
We have enumerated only a few of the specialties we carry. We have always on hand a full line of garden tools of every description, and for every conceivable purpose. Ask for anything you may want in this line. We have it.



15 ft.; alfalfa, 20 ft.; wheat, 25 ft.; oats, 18 ft.; millet, 18 ft. An operator can sow from 40 to 50 acres per day. Price—\$1.50. Weight 9 lbs.

Black Hawk Corn Sheller.—Shells easily, and rapidly separates the cob from the corn. We give it special recommendation to poultry men. Price—\$2.50. Weight 14 lbs.

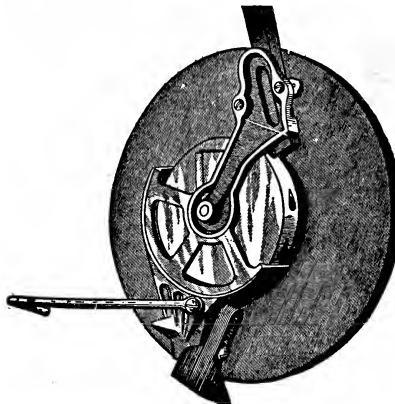
Rittenhouse Seeder.—It has its right side concave in shape and rests nicely against the body just above the hip. The crank shaft being above the distributing wheel brings both hands to nearly a level and gives the operator the easiest position possible. It sows evenly all kinds of grass seeds, grains and fertilizers. Clover is thrown a width of 18 ft.; timothy, 15 ft.; alfalfa, 20 ft.; wheat, 25 ft.; oats, 18 ft.; millet, 18 ft. An operator can sow from 40 to 50 acres per day. Price—\$1.50. Weight 9 lbs.



Home Corn Sheller

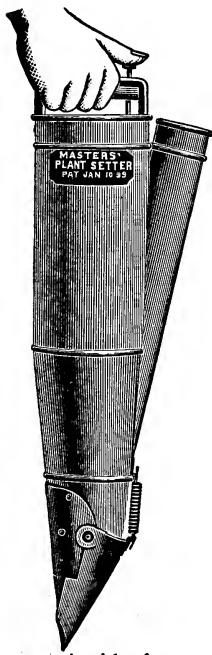
INSECTICIDES—Continued

It is a non-poisonous powder, (except in large quantity), so alluring that cut worms are attracted to it.



Eureka Seed Drill

Cahoon Seed Sower.—The standard Sower, acknowledged to be superior to all other hand sowers. Gives perfect satisfaction and can be used for sowing alfalfa and grains broadcast. Sows from four to eight acres per hour at a common walking gait. A saving of four-fifths of the labor and one-third of the seed by its use. A person entirely unaccustomed to sowing by hand can use this machine with perfect success. Price—\$3.50. Weight crated, 8 lbs. Can be sent by mail.

Cahoon Seeder
Weight crated 8 lbs.

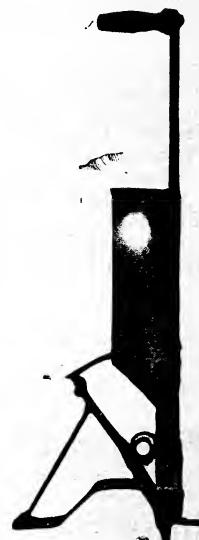
Segment Corn and Bean Planter.—The lightest, most accurate, strongest, cheapest and most up-to-date Planter on the market. Never cracks a kernel nor skips a hill. It is always in position, never makes wrong move. Many gardeners are using this for their replanting, and melon growers are using it to plant watermelons and canteloupes. (See picture). Price—\$1.50. Weight 5 lbs.

Ask for anything you may want pertaining to garden tools; we probably have it, although not listed.

Master's Rapid Plant Setter.—The only hand mechanical plant setter on the market. No stooping when using it, therefore no lame backs. All kinds of plants—Cabbage, Tobacco, Tomatoes, Cauliflower, Strawberries, Sweet Potatoes, etc., are set in water and covered at one operation. Weight 10 lbs.

Price—(Each \$4.50.) Ask for circular.

READ CAREFULLY

Segment Corn
Planter

Read inside front cover page concerning parcel post and postage. Read page 186. You will find more than 300 questions answered.

Read inside back cover page, where 340 questions are answered.

Read pages 89 and 122 for comprehensive information about flowers.

Read pages 1 to 30. See what new things we are offering this season.

Read pages 10-11-12, particularly page 12, about strawberries.

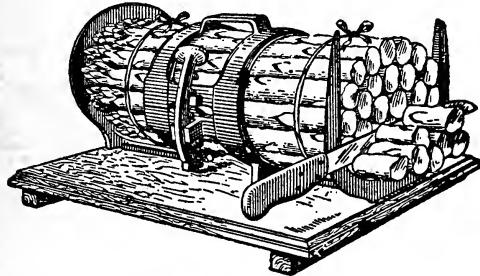
Read on pages 14 and 15 about geranium slips, and do not fail to order some.

See page 16 and back cover about dahlias.

Do not destroy this catalog. It contains valuable information.

The Pennsylvania Fruit Picker.—No ranch is completely equipped without this valuable tool. It is always the choicest fruit that cannot be reached from the ladder; you do not wish to knock it down with a club, as the fall would bruise it. Use the Fruit Picker and the fruit is caught in the pocket prepared for it. Every ranch that has half a dozen or more fruit or walnut trees should have one or more Pennsylvania Fruit Pickers. Price—(50c, by mail 65c).

Raffia for tying Asparagus Bunches—While we offer tape for this purpose, we recommend the use of raffia as being more sanitary, cheaper and better than tape. The large growers along the Sacramento River use raffia exclusively. One pound is equal to 700 yards of tape. Price—(1 lb. 20c, 10 lbs. \$1.75). Postage extra. For large quantities write for price.



Asparagus Buncher

Asparagus Buncher.—We carry the Philadelphia make, which is the popular one with all large shippers. No. 1 size will shape bunches 3-3½ inches in diameter, weighing about one pound. No. 2 will shape bunches 4-5 inches in diameter, weighing about two pounds. Price—(No. 1, \$2.50; No. 2, \$2.75). Mail wt. 10 lbs.

Asparagus Knife.—Price 50c, by mail 65c.

Asparagus Moss.—We always have on hand a large supply of moss for asparagus shippers. Price on application.

NUMBER OF TREES TO PLANT TO AN ACRE

Set at regular distances apart

Distance apart.	No. plants	Distance apart.	No. plants	Distance apart.	No. plants
3 in by 4 in.....	522,720	4½ ft. by 4½ ft.....	2,150	14 ft. by 14 ft.....	222
4 in by 4 in.....	392,040	5 ft. by 1 ft.....	8,712	15 ft. by 15 ft.....	193
6 in by 6 in.....	174,240	5 ft. by 2 ft.....	4,356	16 ft. by 16 ft.....	170
1 ft. by 1 ft.....	43,560	5 ft. by 3 ft.....	2,904	16½ ft. by 16½ ft.....	160
1½ ft. by 1½ ft.....	19,360	5 ft. by 4 ft.....	2,178	17 ft. by 17 ft.....	150
2 ft. by 1 ft.....	21,780	5 ft. by 5 ft.....	1,742	18 ft. by 18 ft.....	134
2 ft. by 2 ft.....	10,890	5½ ft. by 5½ ft.....	1,440	19 ft. by 19 ft.....	120
2½ ft. by 2½ ft.....	6,960	6 ft. by 6 ft.....	1,200	20 ft. by 20 ft.....	108
3 ft. by 1 ft.....	14,520	6½ ft. by 6½ ft.....	1,031	25 ft. by 25 ft.....	69
3 ft. by 2 ft.....	7,260	7 ft. by 7 ft.....	888	30 ft. by 30 ft.....	48
3 ft. by 3 ft.....	4,840	8 ft. by 8 ft.....	680	33 ft. by 33 ft.....	40
3½ ft. by 3½ ft.....	3,555	9 ft. by 9 ft.....	537	40 ft. by 40 ft.....	27
4 ft. by 1 ft.....	10,890	10 ft. by 10 ft.....	435	50 ft. by 50 ft.....	17
4 ft. by 2 ft.....	5,445	11 ft. by 11 ft.....	360	60 ft. by 60 ft.....	12
4 ft. by 3 ft.....	3,630	12 ft. by 12 ft.....	302	66 ft. by 66 ft.....	10
4 ft. by 4 ft.....	2,722	13 ft. by 13 ft.....	257		

Rule.—Multiply the distance in feet between the rows, by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which divided into the number of square feet (43,560) will give the number of plants to the acre.

Do Not Fail to Read inside front cover page, also pages 2, 3, 28, 29, 89, 123, 186, and inside of back cover page. More than 1000 questions are answered on these pages.

Read all foot notes; you will sometimes find the information you are looking for.

Be sure to ask for our garden manual. It is free with your first order for seed, however small.

Do not destroy this catalogue; there is too much valuable information in it.



Pennsylvania Fruit Picker

PLANET JR. GARDEN TOOLS

Hand Cultivators and Seeders have become a garden necessity. One man with a hand cultivator can do the work of six men with the hoe, and do it easier. All are good, but some are more adaptable for all purposes.

Space will not permit a detailed description of all the garden tools we offer, but a short reference to each will suffice to let you know what we have, and if interested, please write for special circular or detailed description of what you want.

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow

This tool combines in a single convenient implement, a capital hill-dropping seeder, a continuous row seeder, an admirable single wheel hoe, an excellent furrower, a capital wheel cultivator and a rapid and efficient wheel garden plow. As a Seeder the No. 4 is accurate, simple, durable, reliable and easy running, doing first-class work in every particular. Price, complete, \$12.00.

Price, complete, \$12.00

Weight, 47 lbs.

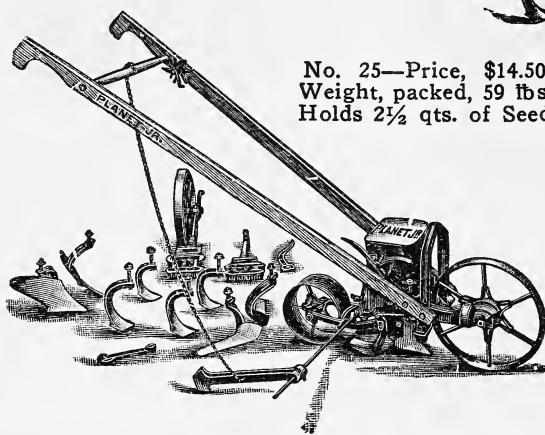
As a Seeder, only \$10

Holds 2½ qts. of Seed



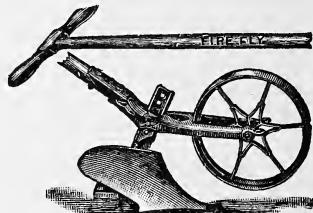
Planet Jr. No. 4

No. 25—Price, \$14.50
Weight, packed, 59 lbs.
Holds 2½ qts. of Seed



Planet Jr. No. 25

Planet Jr. No. 25—Combined Hill and Drill Seeder and Double Wheel Hoe and Cultivator and Plow. Price, \$14.50. Weight, packed, 59 lbs.



Fire Fly

Planet Jr. Fire Fly.—1 plow only. Price \$3.00. Weight packed, 30 lbs.

No. 14 Planet Jr. Double Wheel Disc Hoe

This new tool will give excellent satisfaction; is especially pleasing to all who work peat lands. There are three oil tempered discs on each side.

The set of prong cultivator teeth are constructed on entirely new lines, and will be found invaluable in general cultivation.

The plows are the regular Planet Jr. model and are continually valuable for furrowing, covering and plowing.

Price, complete, \$9.00.

Price, with Attachments, as in cut, \$9.00

Cultivator and Plow
Weight, 38 lbs.



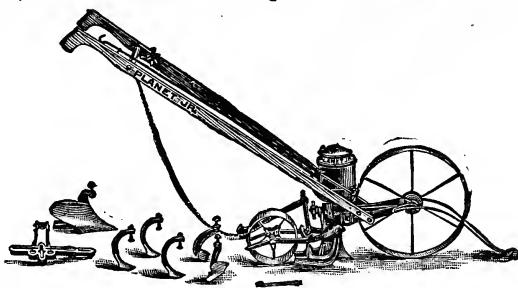
No. 14

Our line of garden tools is complete. We have everything the gardener or rancher can possibly need. If you do not see what you want on pages 142 to 147, write for it. We will get it for you.

No. 6 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow. Price, complete, \$14.50. Weight, packed, 65 lbs. As a Seeder only, \$12.00; as a Wheel Hoe only (No. 6), \$7.00. Holds over 2 Quarts of Seed.

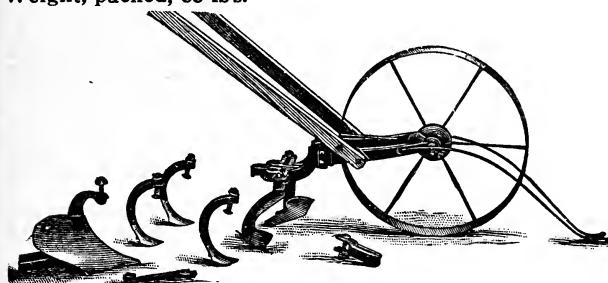
This is our latest Combined Hill and Drill Seeder and Wheel Hoe, and after three years' gratifying use in the field, every detail has been perfected.

What It Will Do.—It drops all garden seeds in hills and sows in drills, with the greatest regularity, in a narrow line, to any exact depth required, covers, rolls down and marks the next row, all at one passage. As a wheel hoe, it hoes, cultivates and plows all garden crops, completing a row at every passage, up to 16 inches in width.



No. 6

No. 36 Planet Jr. Single Wheel Hoe, Cultivator and Plow
Weight, packed, 33 lbs.



No. 36

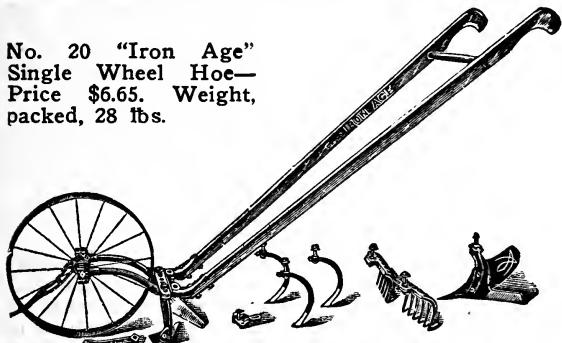
Price, complete, \$7.00

The whole combination is the best and most useful we have ever offered. We advise buying the machine complete, as there is a considerable saving by doing so, but we sell the seeder and the Wheel Hoe separately, if desired. The extra attachments will also fit the No. 6 machine complete with the No. 36 Wheel Hoe.

IRON AGE GARDEN IMPLEMENTS

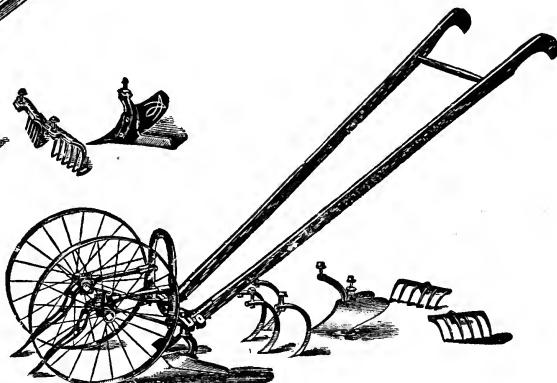
The Iron Age Cultivators are very popular because of the large wheel which has made it easier to work. It is well made and gives perfect satisfaction wherever used.

No. 20 "Iron Age"
Single Wheel Hoe—
Price \$6.65. Weight,
packed, 28 lbs.



No. 20

No. 20.—All necessary working tools for accomplishing a great variety of work are furnished, such as side hoes, cultivator teeth, rakes and landside plow, as shown below.

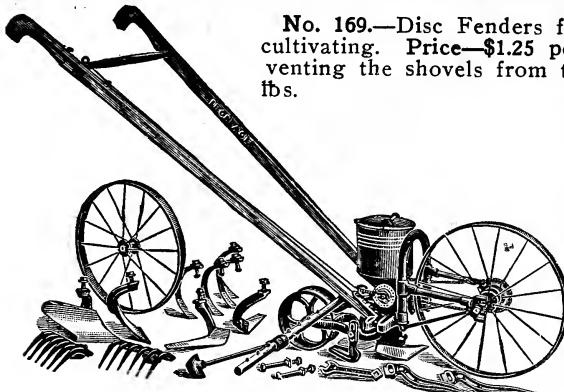


No. 1

No. 1.—The change from a Seed Drill to a Double or Single Wheel Hoe is quickly made. The photograph shows the Double Wheel Hoe with side shoes applied.

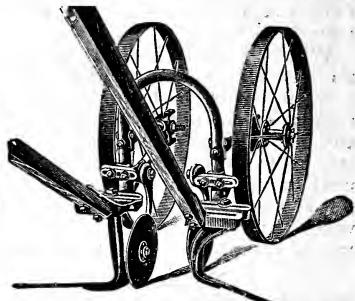
"Iron Age" Double and Single Wheel Hoe.
Price \$8.00. Weight, packed, 40 lbs.

IRON AGE GARDEN IMPLEMENTS—Continued.



No. 6

No. 6.—Combined in this tool are three distinct and thoroughly practical implements, a Hill and Drill Seeder, a Double Wheel Hoe and a Single Wheel Hoe. As a Hill and Drill Seeder, packed weight, 57 pounds. Price \$13.00. As a Seeder only, \$10.50.



No. 169 Disc Fenders

No. 170.—Double Moleboard Plow. Will fit on Nos. 1 and 20 frames. Price—\$1.55. Packed weight, 5 lbs.

No. 184.—Fertilizer Attachment as a Side Dresser. Will fit on Nos. 1 and 20 frames. Price \$4.75. Packed weight, 5 lbs.

No. 25.—Fertilizer Attachment as a Drill. Will fit on Nos. 1 and 20 frames. Price \$5.25. Packed weight, 10 lbs.

No. 369.—Disc Attachment. Will fit on Nos. 1 and 20 frames. Price, complete, \$2.25. Packed weight.



No. 19. "Iron Age" Wheel Plow and Cultivator.
Packed weight, 22 Pounds. Price \$4.00.

No. 19.—To meet a demand coming from some sections for a Weed Plow and Cultivator equipped with a higher wheel than anything we have previously offered, we designed our No. 19 "Iron Age" Wheel Plow and Cultivator. In doing so it will be noticed we have kept in mind those excellent features which have made our whole line of "Iron Age" Garden Implements so popular, viz., lightness combined with strength.

A WORD ABOUT GARDEN TOOLS

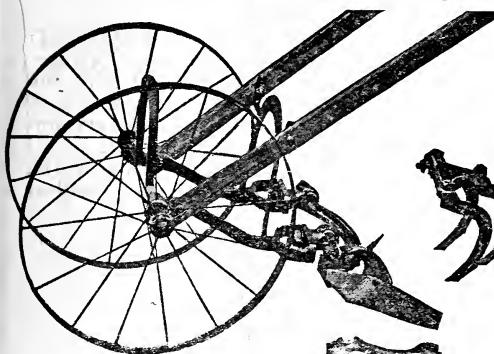
The gardener, in order to be successful, must have adequate tools. The small gardener can get along with a combination tool that can be used for single and double wheel cultivator and a hill and drill seeder; indeed with all attachments of the combined garden tools such as Planet Jr. No. 25 and Iron Age No. 6 there is little else necessary except a good hoe and rake. But for the extensive gardens where a number of men are employed and where planting goes on continually, it is a waste of valuable time to transform a seeder into a cultivator and cultivator into a seeder; it is then advisable to have a number of tools ready for all purposes.

For seeding only, the COLUMBIA PLANTER eclipses all others. It puts a definite quantity of seed at certain distances and there is no waste of seed, with little or no thinning out. There is no limit to the varieties of seed that can be planted with the Columbia.

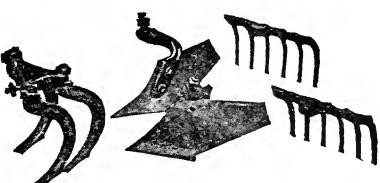
For cultivators, both hand and horse, there is such a diversity of attachments that gardening with them is a pleasure. We advise that you familiarize yourself with the various uses of these attachments, thereby making your labor not only shorter but easier, besides greatly increasing your profit.

The gardener or rancher, large or small, should consider carefully the merits of the Columbia Gang Planter and the Hand Planter with horse attachment.

THE EXCELSIOR GARDEN CULTIVATOR



They are properly balanced, light and strong; there is no extra weight where weight is not necessary; no weak points, and the materials are of the best.



Excelsior Garden Cultivator. Price \$8.00

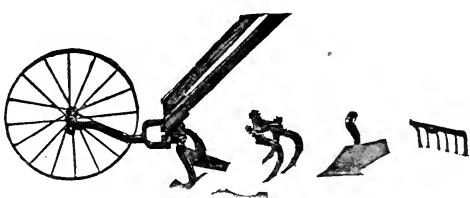
One of the important features of the Excelsior is the simple manner in which the hoes can be tilted or adjusted to meet the most exacting demands of the operator.

Light Steel Wheel, 16 inches in height; 1-inch tire. Hoes equipped with Patent Adjustable Joints, and all parts thoroughly adjustable.

With one pair hoes, two gangs cultivator teeth, one pair plows and one pair rakes, **\$8.00**.

No. 56.—Complete with 6-inch Hoes, Cultivator Teeth, Plow and Rake. Price, as per cut, **\$5.85**. Packed weight, 23 lbs.

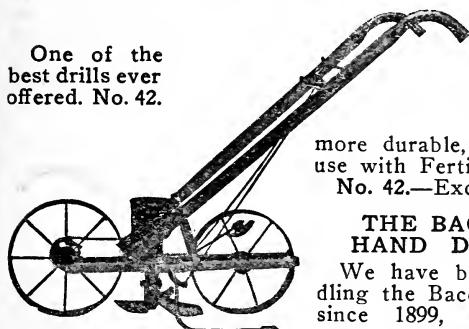
Combine the same degree of efficiency, strength and easy running qualities as found in our Double Wheel Machine. Designed principally to work between the rows; but by changing the wheel on the other side of the arm, both sides of the row can be worked with one operation.



No. 56. Price \$5.85

EXCELSIOR ALL-STEEL DRILL

One of the best drills ever offered. No. 42.



This All-Steel Drill is an improvement over the famous Excelsior Drill which has given such excellent satisfaction among gardeners. The working parts are practically the same, but its steel construction makes it much lighter, more durable, easier running and better adapted for use with Fertilizer Attachment.

No. 42.—Excelsior Seed Straight Line Seeder, **\$11.00**.

THE BACON HAND DRILL

We have been handling the Bacon Drills since 1899, and the many customers who are using them are unanimous in praise of their durability and accuracy. All who have used this drill claim it is the most durable of all, absolutely reliable to sow evenly from one end of the row to the other. Has angle steel frame with Hill Dropper, Agitator and Front Wheel Extensions of Malleable Iron, giving strength with lightness.

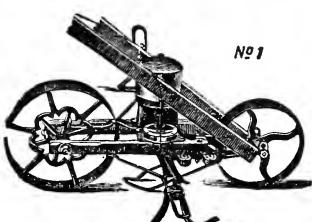
The Hill Dropper will deposit seeds in hills, 9, 12, 18 or 36 inches apart.

The feed, while simple, handles a very large variety of seed, getting an even distribution that is unequalled, and very noticeable in sowing Salsify, Parsnip, Prickly Spinach, Peas, Beet, etc., getting an even row with light seeding.

The feed will also handle Phosphates, which can be sown before or after seeding.

The Drills have a Shoe Opener, which deposits seed in a narrow line, allowing close cultivation, saving hand labor. No. 10.—Hill and Drill Seeders, **\$8.00**.

See our library of books concerning vegetables and poultry on page 185.

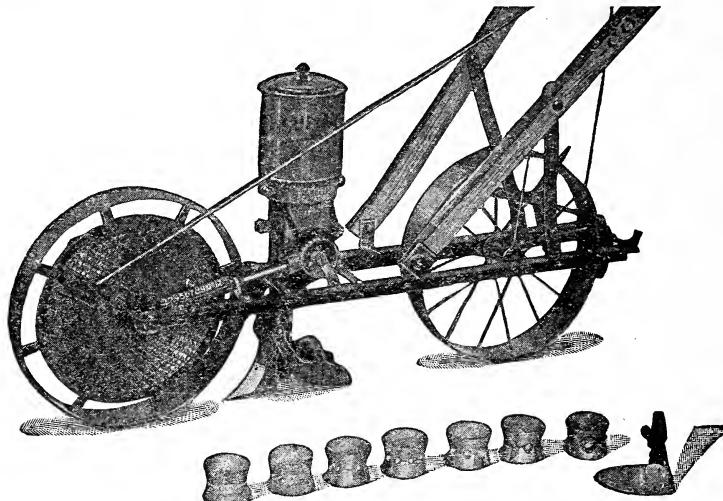


Bacon Hand Drill No. 10

THE COLUMBIA MACHINES

The Greatest Seeding Machines in the World

They sow any kind of seed, large or small. They are all A POSITIVE FORCED FEED. Every seed is carried to the ground and covered; not a seed can escape, and not a seed can pass through the machine nor escape to the ground until the machine is in gear and moves forward and is ready to do its work; nor can a seed be shaken out or get to the ground when the machine is out of gear. A very important advantage possessed by no other planter. They are the simplest of all planting machines; the most certain and most complete planters in the world. WONDERFUL LITTLE MACHINES; plant all kinds of seeds, from the smallest to the largest.

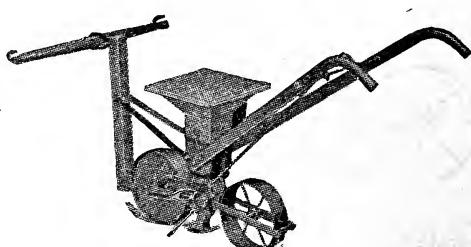


Columbia Hand Planter

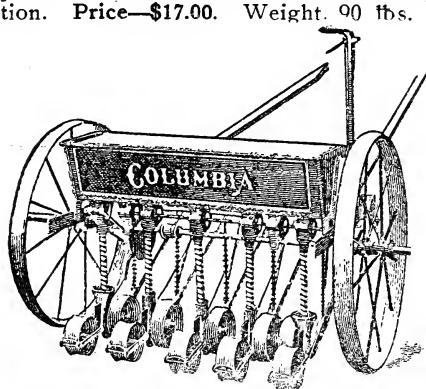
THE COLUMBIA HAND PLANTER.—You can plant from one inch apart to ninety-six inches apart by the simple manipulation of the disk wheel and the cylinders. With this drill you can sow any seed in any quantity any distance apart that you desire. It will sow cucumber and muskmelon seed any distance apart up to eight feet. It will sow your pepper, tomato, and any other crops in the field that now must be done by transplanting. It is a universal planter because there is nothing in the seed line from the size of lima beans to turnip seed that it will not plant. With special apparatus it will plant shelled peanuts without crushing the seed. Price—\$14.00. Weight 85 pounds.

COLUMBIA PLANTER WITH HORSE ATTACHMENT

Just the Machine for Large Planters
It plants what you want, just how you want it. Write for further description. Price—\$17.00. Weight 90 lbs.



With Horse Attachment



No. 2 Gang Seeder

THE NO. 2 COLUMBIA GANG SEEDER

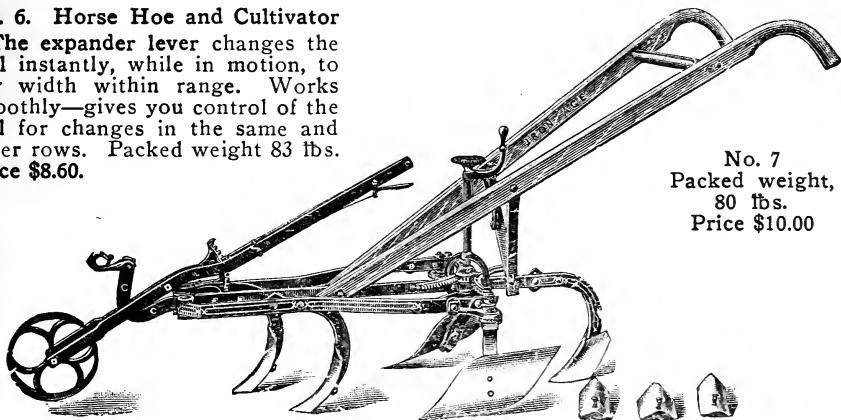
Just the Thing to Sow Beet Seed or Beans
The same seeding principle is built in a way that two to five rows may be drilled at once, and may be drawn by one horse. This is just the machine for large growers, no matter what you wish to plant. It saves the expense of thinning out as must be done with the other seed drills. Price \$100. If interested, write for further particulars.

HORSE HOES, CULTIVATORS AND HARROWS

This tool is a complete machine, with lever expander, lever wheel, and three extra points to make the machine into a five-tooth cultivator. It is also furnished with either or both expander lever or lever wheels, or in any one of many combinations, with or without various attachments for special work.

No. 6. Horse Hoe and Cultivator

The expander lever changes the tool instantly, while in motion, to any width within range. Works smoothly—gives you control of the tool for changes in the same and other rows. Packed weight 83 lbs. Price \$8.60.



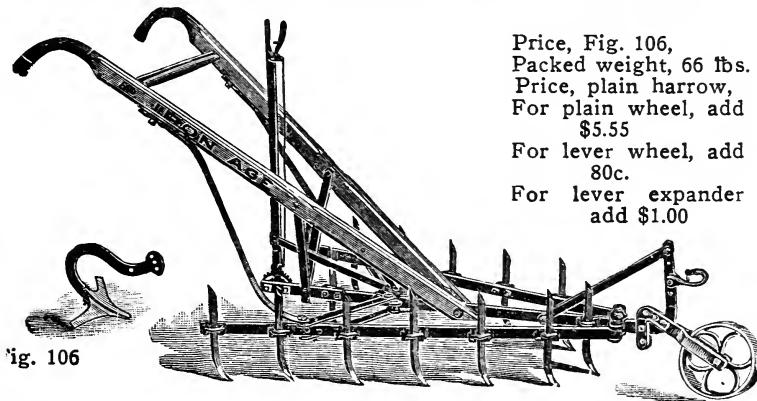
No. 7
Packed weight,
80 lbs.
Price \$10.00

Expands to 30 inches and closes to 14—as a cultivator, will close to 11. Can be set to hoe, ridge, cover, etc.—the standards are reversible and adjustable at different angles.

The long, high steel frame makes the tool run steady and clear of trash. Every tool in this line is light, yet strong and rigid—all are very simple in construction, compact and convenient; has a crank expander. Price \$10.00.

NO. 1 COMBINED HARROW AND CULTIVATOR

Price, Fig. 106,
Packed weight, 66 lbs.
Price, plain harrow,
For plain wheel, add
\$5.55
For lever wheel, add
80c.
For lever expander
add \$1.00



A combination tool with high frame, clean-cut construction and adaptation for many crops and two kinds of cultivation—as a harrow and as a cultivator.

A good tool in small fruits, sugar beets, etc. Opens to 34 inches and closes to 11. Furnished with or without expander lever—also, less the wheel. May be had with either.

Combination harrow and cultivator teeth or with double end cultivator points. The regular teeth, as shown in Fig. 106, are adjustable for height and angle.

FERTILIZE WHEN PLANTING

At practically all the Experiment Stations, where accurate tests are made and no guess work as to yields indulged in, it has not paid to divide the commercial fertilizer into two or three parts and make two or three applications. The net profit has been greater where all the fertilizer has been put in before planting. Where increased yields resulted from two or more applications the increase was not usually sufficient to pay for the extra work.

If the soil be a loose sandy one, and the nitrogen in the fertilizer in nitrate of soda, possibly two applications might pay, but as a general rule the cost of two applications over the cost of one is just that much lost.

See page 74. Fertilizers for every crop and condition of soil.

LAWN MOWERS

We carry a complete line of Lawn Mowers, and aim always to have the best. The following is a list of what we have, with prices attached:

No. 1.—Capitol Lawn Trimmer and Edger. Does what Lawn Mowers leave undone. Having one side without wheel, it can be run close to walls and trees, cutting grass clean and quick. Can also be used for trimming edges of walks, etc.; 4 steel blades, 6 in. wide. Price, \$6.00 complete.

No. 2.—Pennsylvania Low Wheel. Generally called the low-wheel Pennsylvania. (12 in. \$8.00) (14 in. \$8.75) (16 in. \$9.75).

Pennsylvania High Wheel.—Ten-inch wheels, 4-blade cylinder, especially adapted for lawns that cannot be mowed very often or where the grass is coarse. (15 in. \$15.00) (17 in. \$16.50) (19 in. \$17.50).

No. 3.—Our All-Day Lawn Mower. One of the best of the lower priced lawn mowers. (14 in. \$6.75) (16 in. \$7.50).

Philadelphia Lawn Mower.—Ball-bearing, with improved adjustment of bearings. (14 in. \$9.00) (16 in. \$10.00).

GARDEN HOSE

Owing to the general dissatisfaction of selling cheap and inferior hose, we have discarded all brands except those that have sold for a number of years and have proven satisfactory. You run no risk buying the hose we offer, because we will replace any piece that develops a flaw in the manufacture of it.

No. 4.—A. & M. Moulded Hose is equal in quality to the highest priced grades of any other make. None is superior. ($\frac{3}{4}$ in. 18c per ft.) ($\frac{1}{2}$ in. 16c per ft.).

Torrent Hose.— $\frac{3}{4}$ in. 20c per ft.

No. 5.—The Cooper Brass Hose Mend er. 10c each prepaid.

No. 6.—Brass Hose Couplings. $\frac{1}{2}$ in. or $\frac{3}{4}$ in. Per pair 25c prepaid.

No. 7.—The Rose Nozzle, 60c prepaid.

No. 8.—Boston Nozzle, 40c prepaid.

No. 9.—Wood Hose Menders, $\frac{1}{2}$ in. or $\frac{3}{4}$ in., 15c per dozen prepaid.

No. 10.—Twin Sprinkler, 35c prepaid.

No. 11.—Wilgus Sprinkler, 40c prepaid.

No. 12.—Sprinkling Can. (6 qts. 50c) (8 qts. 60c) (10 qts. 70c) (12 qts. 80c) Prepaid.

No. 13.—Brass Hose Menders, 10c prepaid.

No. 14.—Fan Sprinkler, 35c prepaid.

No. 15.—The Fountain Sprinkler, \$1.00.

We have sprinklers of every description. If you will describe what you want, we will send it to you.

All kinds of Hose Clamps, 5c per pair. Hose Nozzles, a large assortment.

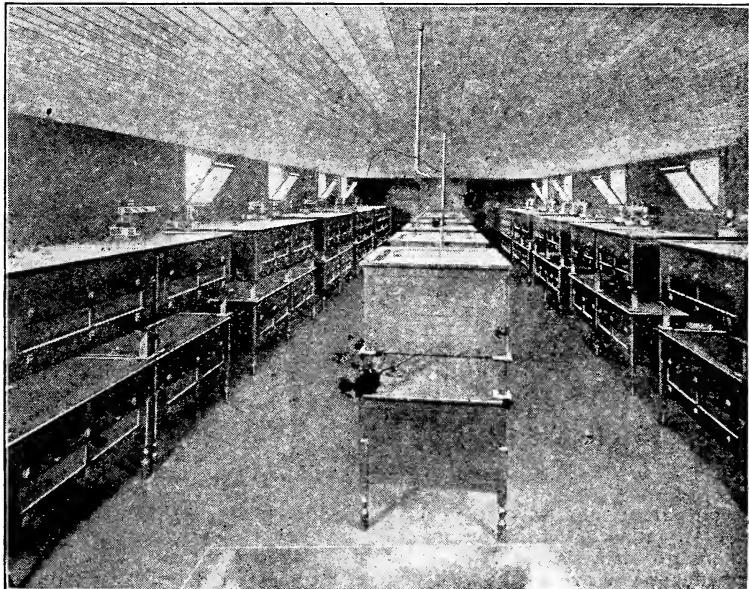
We invite you to call at our place of business or write us stating what you want. We will attend to your request.



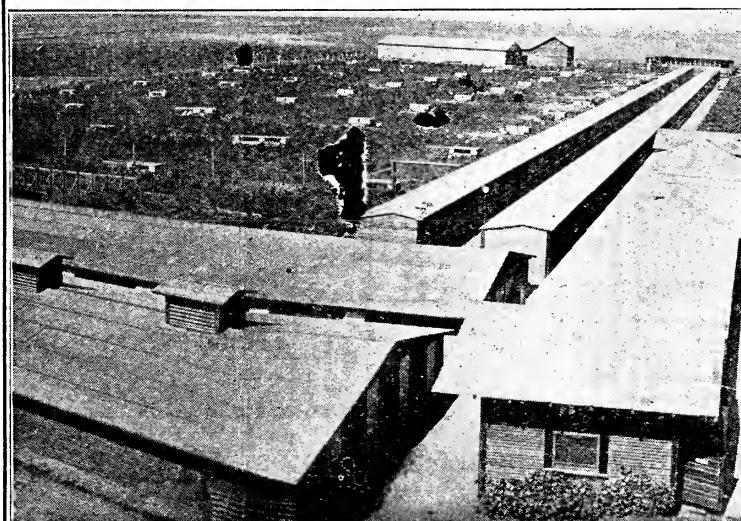
POULTRY SUPPLIES

INCLUDING THE CELEBRATED "ESSEX MODEL" Incubators
THE WORLD'S FAMOUS

AMERICA'S LARGEST LINE OF INCUBATORS
"STANDARD," "MIDDLE-PRICE" AND "NEW HOMESTEAD"
THE "INCUBATORS OF QUALITY"



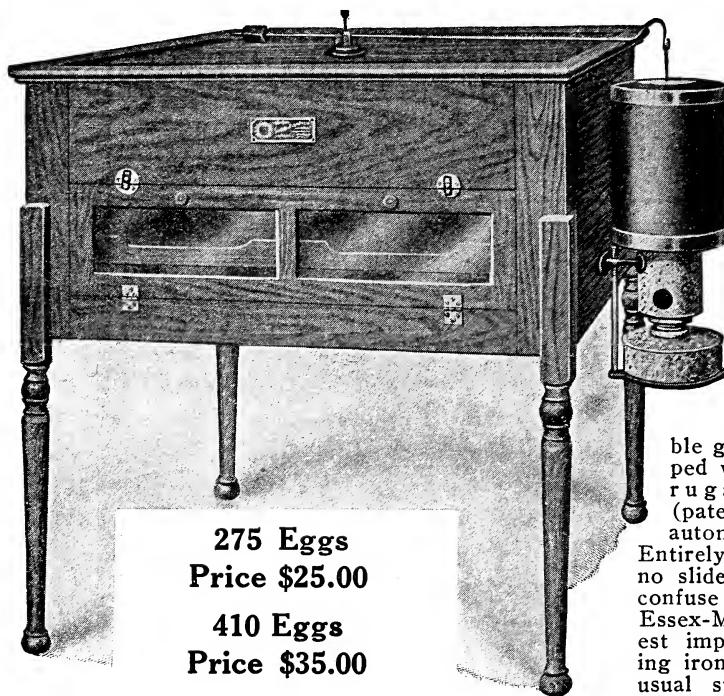
This cut shows 65 Essex-Model Incubators, now in use on the Plant of the Pacific Poultry Company, Inglewood, California



This large ranch has 65 Essex Model Incubators in use the whole year round.

This Plant is proof of the merit of our Essex Model Machines. See cut and description of machines in the following pages.

ESSEX MODEL STANDARD INCUBATOR



275 Eggs
Price \$25.00

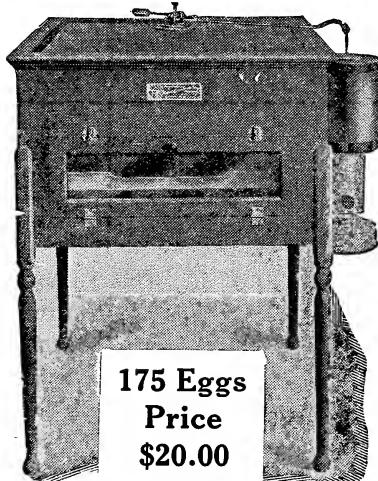
410 Eggs
Price \$35.00

The Famous Essex - Model 'Standard' Incubators illustrated are recognized as the leaders among high-class machines. They are made of high grade chestnut (the only hardwood incubators made). Double walls perfectly packed and insulated with layers of laminated cotton and straw-board. Double glass door. Equipped with "Essex" Corrugated Thermostat (patented), insuring automatic regulation.

Entirely self-ventilating, no slides to adjust or to confuse you. Has 1912 Essex-Model heater, latest improved self-adjusting iron lamp rest of unusual strength and convenience.

If you want an incubator that you can always—all the time, rely on; if you want one that will work for you in cold weather as in warm; that will hatch when the hens go on a strike; in other words—if you want an incubator that will incubate whenever you are ready with your eggs, whether it be down to zero or up to 90 degrees in the shade, you must get one that is Built to Hatch. There is no way out of it! When your hens won't sit during the cold weather, you need an

incubator that will—and there is just as much difference in incubators as in hens.



175 Eggs
Price
\$20.00



100 Eggs
Price
\$15.00

Look at These Prices

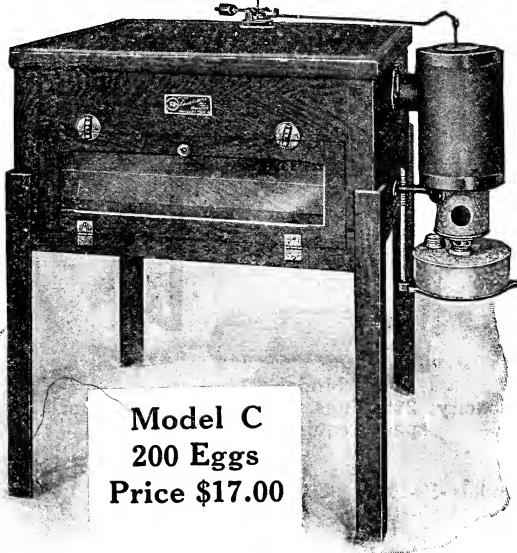
**THE ESSEX-MODEL "STANDARDS"—THE MOST SUPERIOR
INCUBATORS MADE**

Devonshire's Earth Salts.—The only mineral food for stock and poultry, endorsed by leading agricultural chemists and experts.

ESSEX MISSION FINISH INCUBATORS

The Best Machine Made and
at the Lowest Prices

THESE LATEST IMPROVED Essex-Model "MIDDLE-PRICE" Incubators for 1914, with their popular Mission Finish design, represent the greatest advance of years in Incubator construction. They are down-to-date. Like all other "Essex-Models" they are thoroughly well made. Double walls packed and perfectly insulated. Top packed and perfectly insulated with laminated cotton. Equipped with the "Essex" Corrugated Thermostat (Patented), ensuring entirely Automatic Regulation. Positively self-ventilating—no slides or valves to operate or to confuse you. Has 1914 Essex-Model Heater and Self-Adjusting Latest Improved Lamp Rest. (Patent applied for.) Unequalled by any other make in egg capacity, price, construction and



Model C
200 Eggs
Price \$17.00

hatchability.

They are really in a class by themselves. No other Incubator on earth is made like them. In quality they excel. In price they are as low as it is possible to make a good hatcher. Their fronts and doors are of chestnut, yet they are so reasonable in price as to be within the reach of everybody. Exceeded by none except our all-chestnut "Standard" machines. This year they contain galvanized wire trays, the same as used in our "Standards." Sold by leading merchants everywhere. For full description see previous pages.

**HIGH IN QUALITY—
LOW IN PRICE**

Model C.—When considering this 200-Egg Essex-Model "Middle Price" Incubator costs only 9 cents an egg—and then compare it with any other make, you will say, "It is the best on earth at the price." It is a

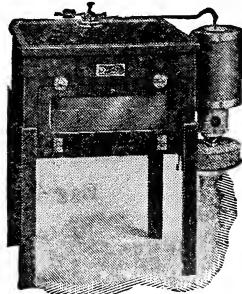
size that suits most poultrymen. It can be operated with any number of eggs from 200 downwards. It affords the beginner room to grow, and is therefore an economical size to buy. We call it a MIDDLE-PRICED machine, but on account of its quality it is classed among the higher priced incubators. Double walls packed and perfectly insulated. A special bargain this year, \$17.00.

Model B—High in Quality—Low in Price

You cannot get a better machine of 120-egg capacity for \$12.00 anywhere. The price is the only thing that is cheap about them.

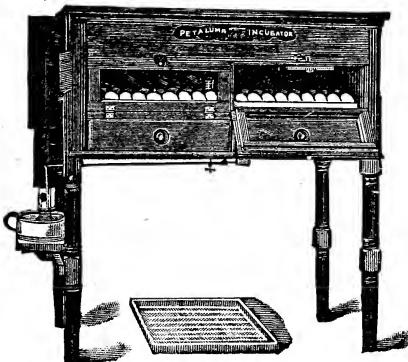
MODEL A \$8.00. The Family Machine

Any family can have an incubator at a low cost. Why bother with setting hens when you can get a 70-egg incubator at the low price, \$8.00. No trouble to raise chicks. No lice, no vermin, when hatched in our Model A Incubator. Only \$8.00.



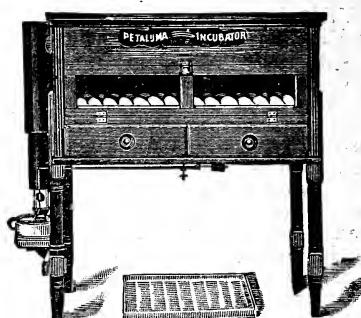
Model A 70-Egg \$8.00

PETALUMA INCUBATORS AND BROODERS



Model 27

Capacity, 216 Eggs. Price, \$27.00. Floor space required, 44x27 in.



Model 80. Price, \$20.00

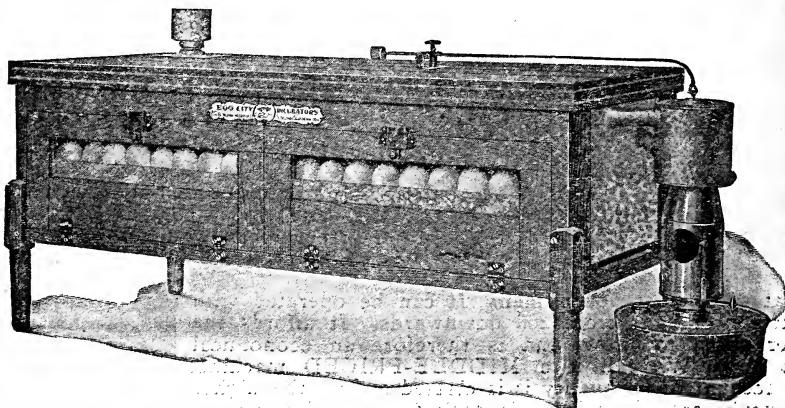
PRICE LIST OF INCUBATORS

Models 59-59½	Capacity 54 Eggs	Retail Price \$10.00	Weight 30 lbs.
Models 80-80½	Capacity 126 Eggs	Retail Price 20.00	Weight 70 lbs.
Models 81-81½	Capacity 216 Eggs	Retail Price 27.00	Weight 100 lbs.
Models 82-82½	Capacity 324 Eggs	Retail Price 35.00	Weight 135 lbs.
Models 83-83½	Capacity 504 Eggs	Retail Price 50.00	Weight 210 lbs.

EGG-CITY HOT-WATER INCUBATORS

Egg-City Incubators are not of the cheaply constructed kind intended to last but a year or two, but they are made by competent workmen, out of the best materials to be had in the market, and are strictly first-class.

There is nothing cheap about them but the price. Prices may be compared to other low-priced incubators and brooders, but the quality cannot. They are really high-class goods sold at a low price. A comparison of Egg-City with any other hot-water machines will always result favorably to the Egg-City. You get more for your money, besides We Pay Freight to your nearest Railroad Station or Steamer Landing in the United States.



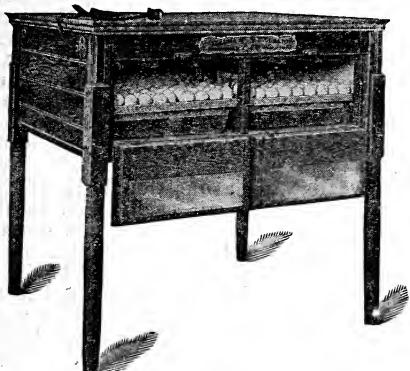
Model 126

Egg-City Incubator. Capacity 126 Eggs. Price \$14.00

Model	Capacity	Weight	Price
A	180 Eggs	100 lbs.	\$20.00
B	360 Eggs	165 lbs.	30.00
C	540 Eggs	210 lbs.	45.00
D	720 Eggs	265 lbs.	60.00
F	1080 Eggs		80.00

Keep this book for the egg-record.

PETALUMA ELECTRIC INCUBATORS



Petaluma Electric Incubator,
Model 190-E. Capacity 126 eggs.
Price \$22.00

A look at the Petaluma Electric will quickly demonstrate its simple form and the clever adaptation of electricity to the hatching of chickens. There are no complicated parts. No intricate mechanism to get out of order. The heating element consists of wire of special make, coiled on cores suited to the purpose, and tipped with ferrules. In some respects they look like an elongated cartridge fuse, but of our own peculiar construction to meet our particular requirements. We have adopted the term "Unilec-ter" to designate a unit of our heating element. It is an adaptation from the words Uniform Electric Heater. It is all so simple, that one can scarcely believe we have outstripped everybody and everything else, and succeeded in accomplishing what we have. An examination, however, proves all our statements to be true, even to the smallest detail, so

that the investigator becomes fully satisfied that nothing has ever been made to equal the Petaluma Electric, and places us in the lead as manufacturers of a real practical electrical incubator. One that does not require an electrician to run it. One that is simple enough for any person to understand. One that is unique in construction, safe, reliable, and using but a small amount of current. One that controls the heat perfectly and will not get out of order. One of very few parts and very simple mechanism, and that will hatch anything that can be hatched. If you owned one you would not take five times its cost if you knew you could not obtain another like it.

The Petaluma Electric Incubator is made in sizes of 63 eggs, 126 eggs, 252 eggs, 504 eggs, or in fact any size up to one million eggs.

The Petaluma Electric Incubator is adapted to using direct or alternating current, and either 110 or 220 volts. Please be very careful to know before hand what current you are to be supplied with, as well as the voltage, and specify same when ordering.

Each Incubator is equipped with our steel, galvanized and corrugated Egg Tray with drop section for the chicks to drop into the Nursery. Wire Nursery Basket, Egg Tester, Thermometer, Regulator and Electric Current Breaker, six feet of cord with plug to screw into an electric light socket and directions for operating.

The Model 189-E does not have a Nursery.

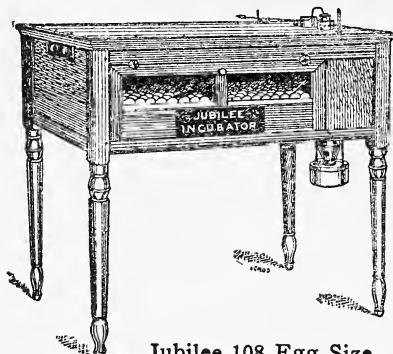
SIGNAL LAMP.—Each incubator has a small electric signal lamp in the upper part of the egg chamber which indicates when the current is on or off. When the lamp illuminates the egg chamber it indicates that the electric current is on, and only then is the current being consumed. The incubator of course works as well without the lamp, but it furnishes light with which to read the thermometer, and by its continued flashing indicates to the operator how nicely the machine is working, no matter what part of the incubator house he may be in so long as he can see it. Lamp can of course be removed at any time if not desired, as it has nothing to do with the heating. Its sole purpose is a signal.

Prices—Model 189-E, 63 eggs, \$12.50. Model 190-E, 126 eggs, \$22.00. Model 191-E, 252 eggs, \$30.00. Model 193-E, 504 eggs, \$52.50.

Devonshire's Earth Salts for stock and poultry in 50-cent, \$1.00 and \$3.00 packages. Postpaid 10c extra.

Devonshire's Earth Salts.—Write for Major Devonshire's pamphlet, "Essays in Practical Poultry Keeping in California," Free.

HOT-WATER JUBILEE INCUBATORS AND BROODERS



Jubilee 108 Egg Size

to summarize. Come in and let us explain it personally; we can do so much better

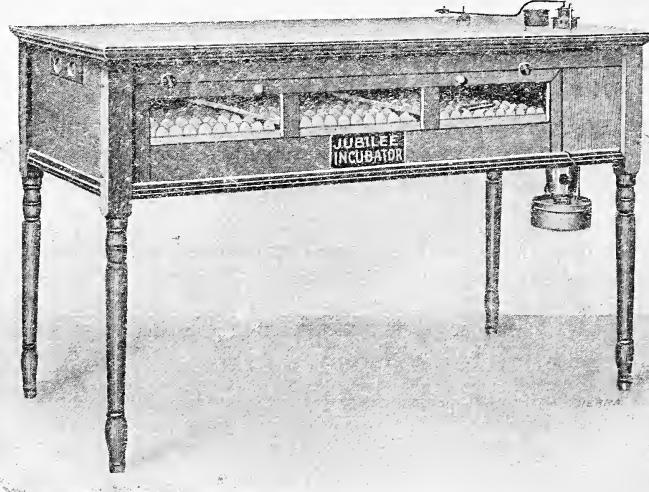
The Jubilee heater consists of a lamp, a compound boiler, and a coil of pipe encircling the egg chamber.

The tubular, compound, copper boiler is enclosed at the right hand end of the machine. The boiler is filled with water through the expansion cup; very little water is required even in the larger sizes. The heat from the lamp rises and makes a double turn around the boiler before passing out through the flue extending through the top of the machine, thus compounding the heat, making every part of the boiler "heating surface" and heating every part alike. The water being heated rises and passes swiftly through the coil of pipe in the egg chamber, makes the circuit and returns to the boiler to be reheated. The water circulates with remarkable speed owing to the compounding of the heat. This compounding of the heat makes it possible for the egg chamber to be heated in a remarkably short time with a small consumption of oil and a small flame applied to the boiler.

The Jubilee Incubators are radically different from all other Incubators. They are constructed on a different principle, with the same idea in view, it is true, but a different method is followed to gain results. The Jubilees are made from infinitely better materials than any other hot-water machines, more materials are used, and the whole cost of construction is a great deal more than any other hot-water machine.

When investigating a question it is well to know all claims, then sift each claim to the last word, and draw conclusions from the results. Our project is to convince you, absolutely and forever, and we want to begin at the beginning and fight the question out in its

merits, a single issue at a time, the whole issue



Jubilee 504-Egg Size

Capacity	Dimensions	Price
108-egg Jubilee	110 lbs. 2 ft. 8 in. x 3 ft.	\$22.00
216-egg Jubilee	150 lbs. 2 ft. 8 in. x 4 ft. 3 in.	32.00
324-egg Jubilee	200 lbs. 2 ft. 8 in. x 5 ft. 3 in.	40.00
504-egg Jubilee	260 lbs. 3 ft. 2 in. x 7 ft. 2 in.	50.00
1056-egg Jubilee	500 lbs. 4 ft. 10 in. x 8 ft. 4 in.	100.00

Send for Our Complete Jubilee Catalog

If you have any line of poultry you want to sell for breeding purposes, send us a list of what you have, that we may refer to you those who inquire for such poultry. If you want to buy poultry for breeding purposes, inquire of us that we may instruct you where such poultry may be purchased.

THE JUBILEE BROODERS

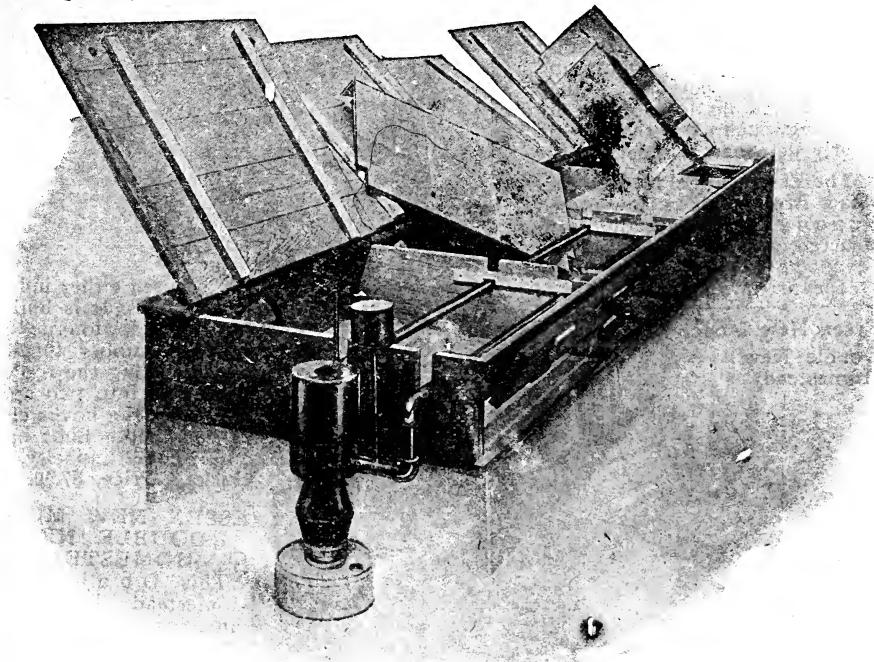
The Jubilee Brooders are made on the Jubilee basis and up to the Jubilee standard. It is more economical to use them than it is not to use them. The per cent of the chicks raised to maturity will be enough greater to repay the cost many times.

The Jubilee Brooders are made in two styles, each for a particular purpose:

The Jubilee Colony Outdoor Brooder.—Constructed in one size only, for strictly outdoor use. A new creation and a wonderful brooder for large and small plants.

Price—\$20.00. Weight, 175 lbs. Dimensions, 5 ft. 8 in. x 3 ft. 4 in.

The Jubilee Sectional Hot-Water Indoor Brooders are constructed in two, three and four sections, to accommodate 50 chicks to each section, and are made for indoor use in brooder houses. There is nothing to wear out, nothing to break, nothing to be replaced, and their life is limited only by the care given them.



Jubilee Brooder

The brooder case is constructed of the best grade California redwood, one inch thick, the whole thing being carefully and accurately joined. Each section is two and one-half feet long, two and one-half feet wide, and ten inches deep. Each section is provided with a hover chamber, properly insulated, well ventilated, and perfectly heated by means of hot-water pipes running just beneath the ceiling of the hover chamber and radiating a warm, moist heat under exactly the same principle as that of the Jubilee Incubator. Each hover chamber is provided with windows, and with a large door hinged from the top, which may be raised to thoroughly clean the brooder. The hover chamber occupies a little more than one-half of the section, the remaining space is utilized as a runway between the hover chamber and the outer runway. The chicks continually pass back and forth from the hover to the outer runway, accommodating themselves to the varying temperatures, and looking out for their own comfort.

The ventilation of the Jubilee Brooders is the most successful and satisfactory ever devised. A sweated chick is a total loss—the Jubilee cannot sweat the chicks, nor can the brooder become foul owing to lack of ventilation.

JUBILEE INDOOR BROODERS

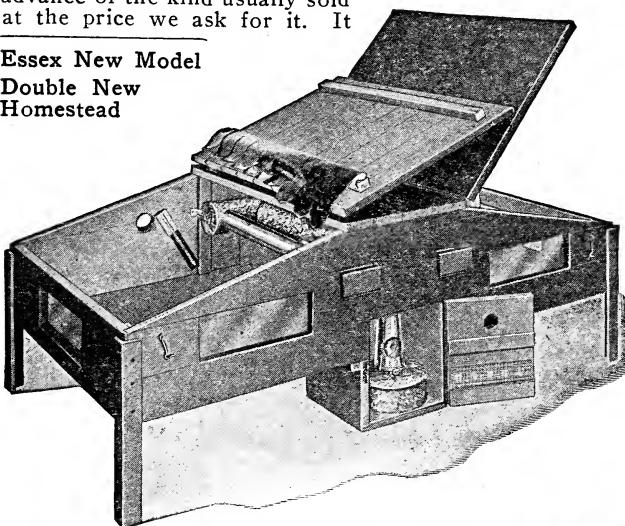
Capacity	Weight	Dimensions	Price
4-section—200 chicks	170 lbs.	2 ft. 6 in. x 10 ft.	\$18.00
3-section—150 chicks	135 lbs.	2 ft. 6 in. x 7 ft.	16.00
2-section—100 chicks	100 lbs.	2 ft. 6 in. x 5 ft.	14.00

ESSEX MODEL BROODERS

Like all other Essex-Model Goods their construction is superior. Construction of the roof alone tells of their high quality. If we except the New Homestead, they all have three thicknesses, including enameled iron covering, the Model C Brooder having five thicknesses over the Hover apartment. In addition to this superior construction ample floor space is provided without the possibility of crowding into corners; and this means comfort, quick growth, and no loss of life by sweating, such as is the case in poorly designed brooders.

The Essex-Model New Homestead Brooder is a low-priced brooder, substantially constructed, and is considerably in advance of the kind usually sold at the price we ask for it. It

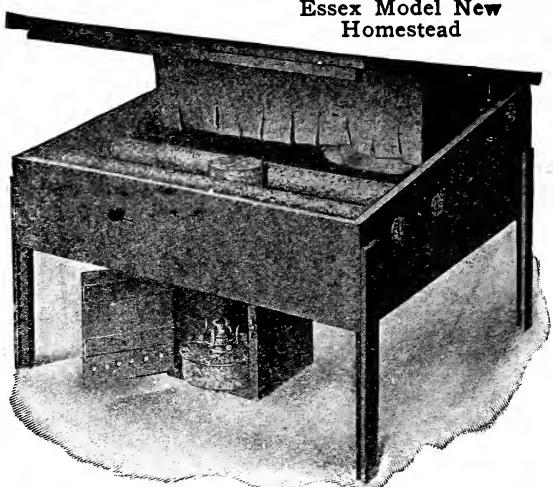
**Essex New Model
Double New
Homestead**



Model A Brooder is a combination indoor and outdoor brooder. Contains two apartments (Hover and exercise room, separated by the Hover cloth). It is $47\frac{1}{2} \times 28\frac{1}{4}$ inches in size. It contains a supplementary roof cover or diaphragm to fit it for use as an indoor brooder; also affording automatic ventilation—the latest improvement in brooders; possessed by no other make. Capacity, 75 to 100 chicks. Price \$10.00.

The Essex-Model C Brooder has three apartments; the hover and nursery, separated by the hover curtain; and the exercise room separated by a removable partition having a door and curtain full width of brooder, so that the chicks never lose their way back to the hover, nor crowd and get chilled in the exercise room, as they may where the exit is only a small doorway. Capacity 200 chicks. Price \$16.00.

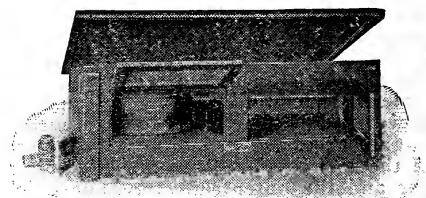
**Essex Model New
Homestead**



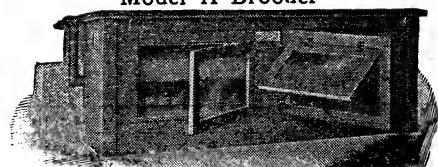
can be used either indoors or outdoors. It is built of $\frac{3}{8}$ dressed, tongue and grooved lumber throughout, including the roof. It is divided into two apartments by the hover cloth. It has ample floor space and light. Capacity, 100 chicks. Price, \$7.50.

**ESSEX NEW MODEL
DOUBLE NEW
HOMESTEAD**

This Double New Homestead Brooder is same as single in construction, but will contain double amount of chicks. It is easy to operate, as lamp is on one side and inside heater covers both ends. Capacity, 150 chicks. Price \$10.50.



Model A Brooder



The Essex-Model C Brooder

INTERNATIONAL SANITARY HOVER

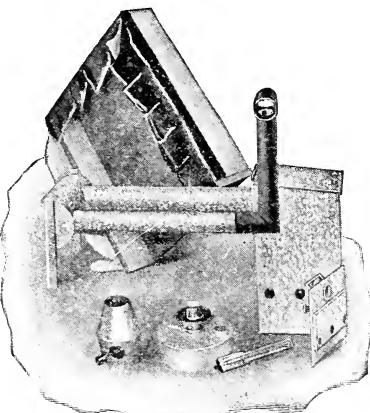


The International Sanitary Hovers have stood every climatic test from Panama to Quebec. Practical poultrymen, state experiment stations, and poultry judges endorse it. You can raise chicks anywhere with International Sanitary Hovers. No specially constructed houses are necessary. There is no better place than in your regular hen houses. Sanitary Hovers are as practical for small back-yard poultry raisers as large poultry farms. They are warmest at the curtain—usable anywhere—ready for business wherever placed. No crowding or smothering of chicks; no kneeling in mud to get at the lamp; no cutting of holes or building of platforms. You want the best brooding device—you will get it in the Sanitary Hovers. Price \$9.50.

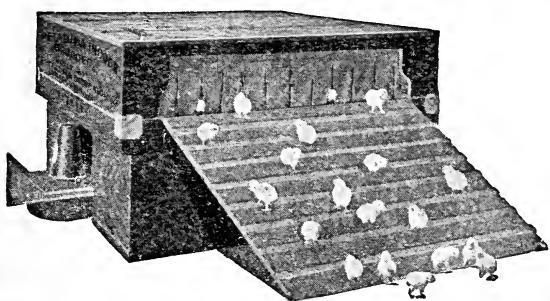
ESSEX MODEL PORTABLE HOVER

This Portable Hover is for use in or out of a brooder—any brooder. It is also intended for use on a barn floor, in a colony house, piano box, brooding house, or any other building where chicks are to be raised. For equipping brooding houses it is highly recommended on account of its labor-saving convenient construction and large capacity.

The above cut illustrates the separate parts of the Essex-Model Portable Hover, including galvanized iron lamp box with lamp and chimney, heat pipes and drum connected with the lamp box. Wooden hover with patent cloth curtain and brooder thermometer—all complete. Price \$8.00.



PETALUMA INDOOR BROODERS



Model 23

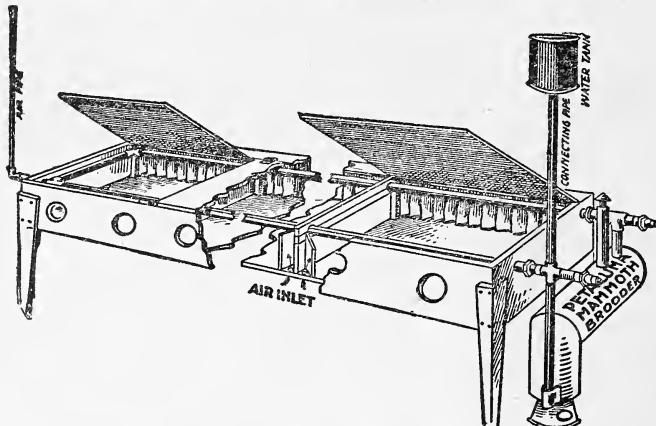
When you are looking for good wholesome food for your hens, write us about our Scratch Food and Midland No. 4. There is nothing better to keep your poultry in good, healthy condition.

Devonshire's Earth Salts for stock and poultry. The greatest agricultural discovery of the century now being officially investigated at Washington.

- Model 23. Capacity, 75 to 100 chicks. Price....\$ 6.00
- Model 25. Capacity, 125 to 150 chicks. Price... 7.50
- Model 28. Capacity, 225 to 250 chicks. Price... 13.50

The cut illustrates the three sizes of PETALUMA INDOOR BROODERS of the very latest design, embodying those principles that have made them so efficient, with added features of ease, convenience, simplicity and economy.

THE MAMMOTH BROODER HEATER



Showing Construction of Mammoth Brooder Heater

This Brooder Heater is made of copper with a galvanized iron jacket. This is the best, cheapest, and most economical brooder heater, for large capacity, ever put on the market, and is rapidly being put into the large poultry plants. All Mammoth Brooder Heaters are, unless otherwise specified, made with three-fourths inch fittings. We fit for one-inch, if required, but it must be so specified.

Petaluma Mammoth Brooder Heater \$10.00, Water Tank and Connecting Pipe \$1.00, Gasolene Tank \$1.15, Gasolene Connecting Pipe 60c, Chimney 25c. This Heater, with either No. 3 Gasolene Burner, will heat 25 to 40 feet.

This combination, complete with No. 3 Burner \$16.50

SECTIONAL AND DUPLEX BROODER HEATERS

The Sectional and Duplex Brooder Heaters here-with illustrated may be used either with coal oil lamps or gasolene burners. The gasolene burners produce more than twice the heat of a lamp, hence brooders in which these heaters are used may be made twice the length given for heating with coal oil.

Petaluma Sectional Brooder Heater and Water Tank	\$5.50
Lamp Fount, Burner and Chimney.....	1.25
No. 1 Gasolene Burner, Gasolene Tank and Gasolene Connecting Pipe, to heat 10 to 15 feet	3.50
Petaluma Duplex Brooder Heater and Water Tank	7.00
Lamp Fount, Burner and Chimney.....	1.50
No. 1 Gasolene Burner, Gasolene Tank and Gasolene Connecting Pipe, to heat 15 to 20 feet	3.50

PRICES OF INCUBATOR LAMPS, ESSEX MODEL

Small size, for Nos. 0, 1, A, B and New Homestead Incubators.....	.75c
Large size, for Nos. 2, 3, 4 and C Incubators.....	.90c

PRICES OF BROODER LAMPS FOR ESSEX MODEL

For Portable Hover on all Brooders; Colony and Double Indoor Brooders.....	.90c
Chimneys, 25c extra.	

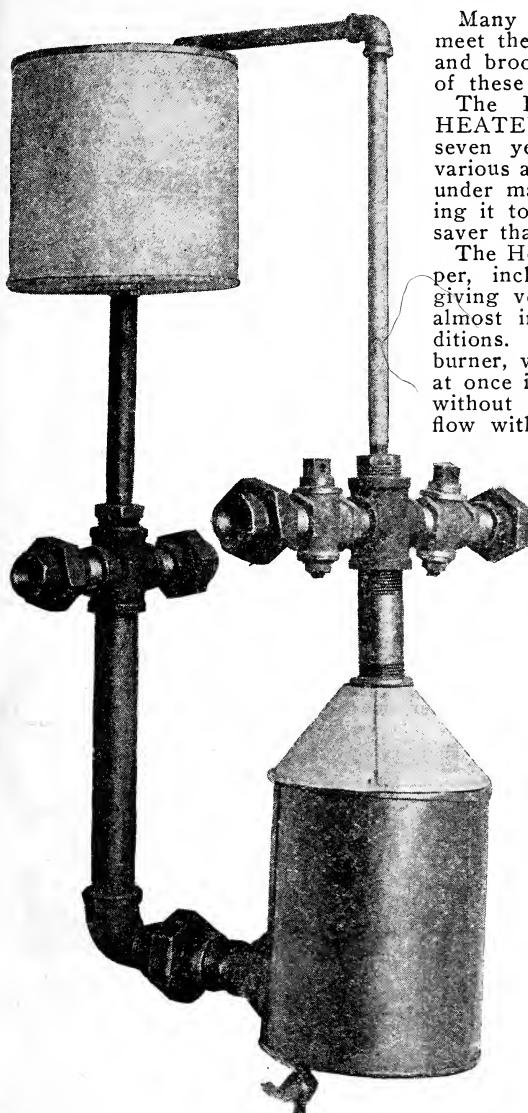
For Portable Hover and Model B Brooders, style A and B Brooders.....	\$1.00
Chimneys, 25c extra.	

For Portable Hover and Chick Comfort Hover and Colony C, 1913.....	.75c
Chimneys, 25c extra.	

Be sure to specify size and style of incubator and brooder for which lamps are wanted.

Devonshire's Earth Salts. All disease is due to a deficiency of mineral matter in the body. Use the Earth Salts and cure and prevent disease in your animals and poultry and yourself.

THE LOS ANGELES BROODER HEATER



Many manufacturers have attempted to meet the demand for a successful brooder and brooder house heating system. Many of these attempts have been unsuccessful.

The LOS ANGELES TUBULAR HEATER has been on the market for seven years, and we feel justified, after various and careful tests by our customers, under many different conditions, in claiming it to be the greatest labor and chick-saver that is on the market today.

The Heater is made of heavy rolled copper, including 16 half-inch brass tubes, giving very large heating surface, and is almost indestructible under ordinary conditions. The heat comes from a gasoline burner, which checks the flow of gasoline at once in case of fire, and is extinguished without any loss. The gasoline will not flow with the feed valve wide open until the gas has been generated in the burner head, making this the safest method of heating to be found in any brooder where artificial heat is used.

The burner will heat 30 feet of the brooder on each side of the heater. This system of heating can be used in either direction from the heater, or both ways. If the pipes run both ways from the heater, either side can be shut off entirely. The heat on one side may be kept warm enough for baby chicks, while the other side is reduced to suit the older ones.

This system is equipped with $\frac{3}{4}$ -inch fittings, to be used with a single coil of pipe on each side, and may be varied to suit the customer's wishes—to connect a double coil, or fitted for one-inch pipe, if desired.

When greater, or more brooder space is necessary, we furnish an oblong boiler, containing more brass tubes, and supplied with two gasoline burners. The complete system includes Tubular Boiler, all pipe connections,

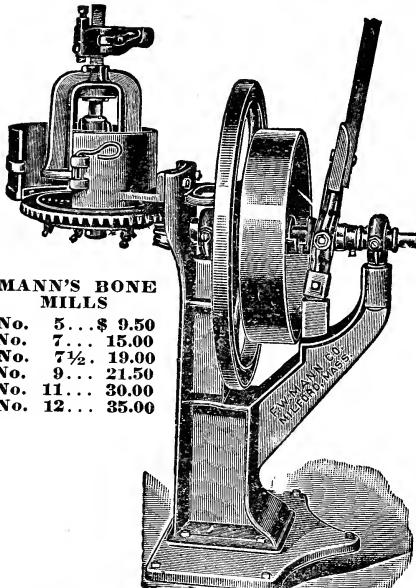
which would include the Unions, Expansion Tank, Insurance Safety Gasoline Burner; in fact, everything as shown in the illustration, and one Gasoline Supply Tank, holding five gallons.

The regular size is.....	\$18.50
Oblong Boiler	24.50
Including two burners.	

THE SAFETY GASOLENE INSURANCE BURNER

Absolutely the safest and most reliable Gasoline Burner made. Burner is so constructed that when the light is turned out, the Gasoline is automatically shut off. Absolutely a safeguard against explosion.

Price	\$3.75 each
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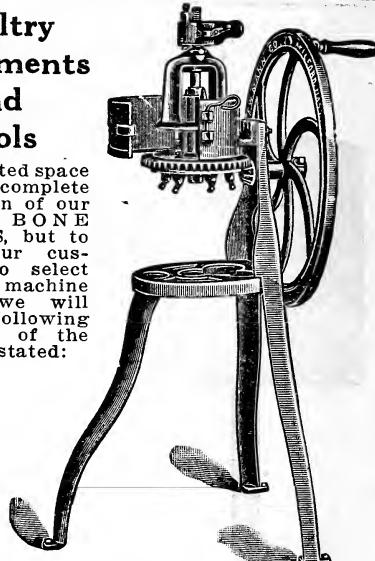
MANN'S BONE MILLS

No. 5 . . .	\$ 9.50
No. 7 . . .	15.00
No. 7½ . . .	19.00
No. 9 . . .	21.50
No. 11 . . .	30.00
No. 12 . . .	35.00

Model No. 12—Price \$35.00

Poultry Implements and Tools

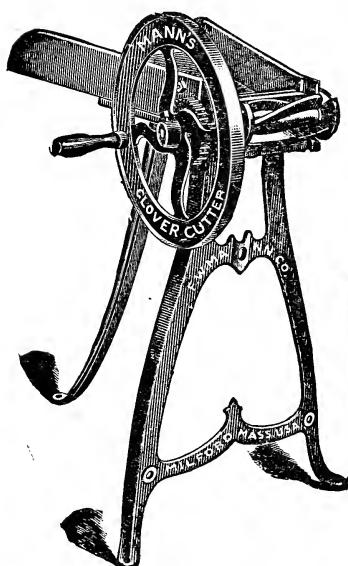
Our limited space forbids a complete description of our MANN'S BONE CUTTERS, but to enable our customers to select the size machine needed, we will give the following capacities of the numbers stated:



Model No. 7—Price \$15.00

- | | |
|--------|--|
| No. 5 | intended for flocks ranging from 15 to 25. |
| No. 7 | intended for flocks ranging from 40 to 100. |
| No. 7½ | intended for flocks ranging from 40 to 100. |
| No. 9 | intended for flocks ranging from 100 to 300. |
| No. 11 | intended for flocks ranging from 300 to 500. |
| No. 12 | intended for flocks ranging from 1000 to 1500. |

The last two sizes mentioned are power machines. For further description we would be glad to send our Mann's complete catalog, which will give full description of each and every machine.

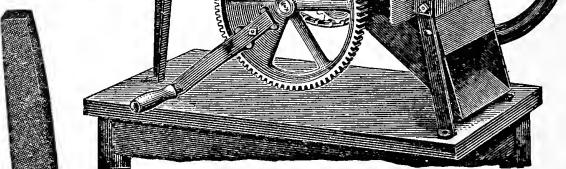


Mann's Clover Cutter

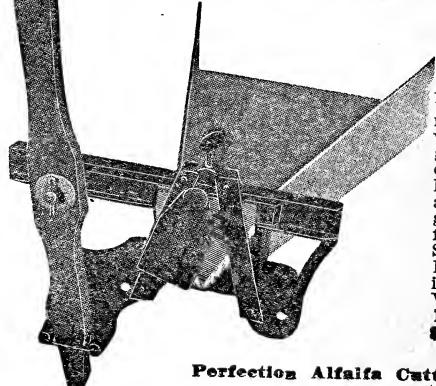
Made entirely of iron and steel. Cannot warp or shrink.

It is strongly built. The workmanship is first-class in every particular, and it will last for years without repairs. It is not a toy or a rattletrap, but a thoroughly practical machine, offering the greatest value for the least money. Do not buy a clover cutter until you have seen the Mann's. Made either with or without the stand. Prices—

With Stand \$12.00
Without Stand 10.00
Weight, crated, 90 lbs.

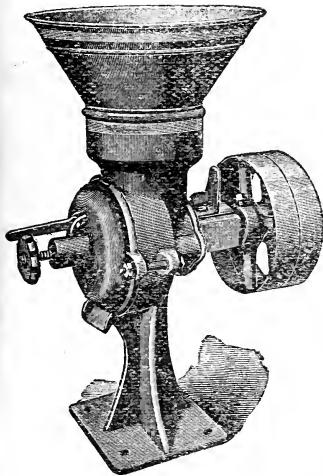


"NEW MODEL" CLOVER CUTTER
Will cut either green or dry clover, alfalfa, straw, vegetable tops, etc., in $\frac{1}{8}$ -inch lengths. Weight 60 lbs. Price, \$11.00.



Perfection Alfalfa Cutter

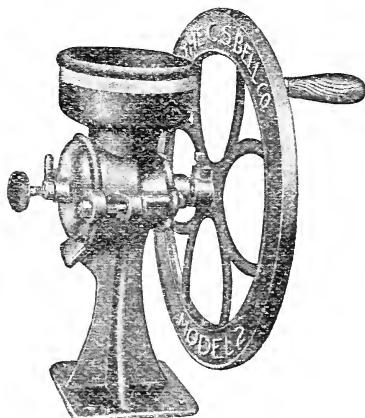
Perfection Alfalfa Cutter — This machine will cut hay, grass, clover, cabbage leaves, or any kind of green feed for fowls. Size 16 in. long by 11 inches wide. Weight, 7 lbs. Price, \$2.00.



GRINDING MILLS

Model Improved Hand Power Grinding Mills are of new and elegant design.

They will grind all kinds of grain, dry bone, shells, roots, bark, salt, etc., and are the best all-round Family Mill. They will produce cracked wheat, graham flour,



and corn meal for the family at the slightest cost and will also produce cracked or ground corn or other grain of any fineness necessary for feeding to the young chicks and the coarse for the grown fowls. They are easily controlled and adjusted, leaving nothing to be desired.

They can be adjusted to grind fine or coarse without the use of wrench or other tools. The Burrs are made of Steel-Alloy Metal, the most durable grinding surfaces made.

Their capacity is about as follows, depending on the condition of the grain or fineness of the meal:

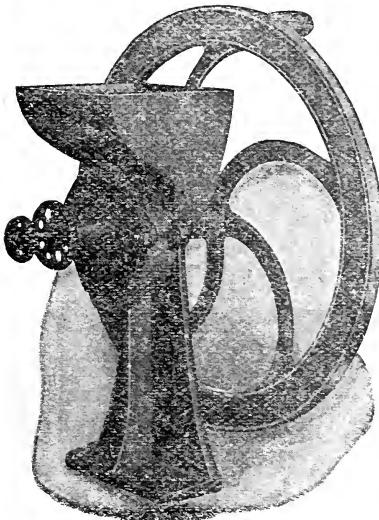
List of Sizes, Weights and Prices

No. and Capacity.	Height	Width	Wheel	Weight	Price
No. 1½, ½ to 1 bushel per hour.....	13	8½	12½	20 lbs.	\$3.50
No. 2, ¾ to 2½ bushels per hour...	16	9½	16½	35 lbs.	5.50
No. 3, 1 to 3 bushels per hour.....	18½	12¼	19¾	63 lbs.	8.00

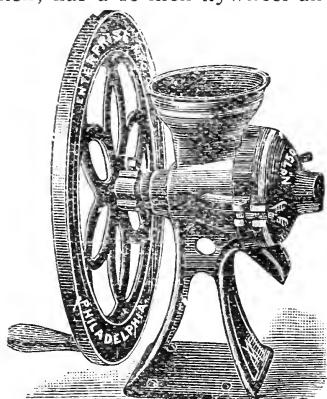
Packed one in a box. Weight: No. 1½, 28 lbs.; No. 2, 50 lbs.; and No. 3, 85 lbs.

Shover No. 32.—In this mill are embodied all the good features of other hand-grounding mills, to which have been added universal burrs or grinding plates that are adjustable for grinding coarse or fine. This machine grinds oats, barley, rye, corn, peas, dry bone, shells, etc., for feeding to poultry. It is a well-designed machine, strong and well-made throughout, and of excellent finish; has a 16-inch flywheel and is light running.

The capacity of this mill is not equalled by any other of the same size. Shipping weight, 40 lbs. Capacity, 1 or 2 bushels per hour. Price, \$5.50. Power Grinding Mill. Price, \$10.00.



SHOVER NO. 32



ENTERPRISE BONE AND GRAIN MILL

One of the essential tools for poultry men. Can be used for cracking grain, bone, shell, or grit. Weight, crated, 75 lbs. Price, \$9.50.

POULTRY SUPPLIES



Pilling Angular Killing Knife

By simply turning the wrist the jugular vein and spinal cord are cut, thereby bleeding the fowl, allowing the feathers to be removed without using water. 50c, postpaid.

Anderson Egg Box.—As a carrier it gives absolute security to the contents; has the same protecting qualities against heat or cold as the Eyre, and possesses great strength. Price—(15-egg box 15c; \$1.20 per dozen).

A. & M. Egg Box.—Just the thing for family trade. They are exceedingly neat in appearance. 2-egg wide and 6-egg long. Price—(1 doz. boxes 20c; postpaid 31c) (50 boxes 75c) (per 100 \$1.00; per 1000 \$10.00). Packed ready for shipment 35 lbs.



DOUBLE CHICK FEEDERS

This Feeder is a money-saver. When feed is thrown on the ground for little chicks you waste the feed. The little ones cannot find it. Put into this feeder it is clean and always ready. Price—(12-inch, 40c; 18-inch, 60c; 24-inch, 75c).

SINGLE CHICK FEEDERS

Single Chick Feeder for same purpose as Double. Price—(25c each; 18-inch, 35c; 24-inch, 45c) prepaid.



feed trough. It allows the operator to carry the trough by the grate. There is sufficient slant on the grate to prevent chicks from roosting on it. Price—(10-inch 40c; 20-inch 60c).

The **GREAT WESTERN DRY MASH FEEDER** is made in three sizes: 18-inch, 24-inch and 30-inch. It is made of best heavy galvanized iron, nicely bound with heavy wire, making it perfectly rigid and strong. Will last for years. Fowl can eat on both sides of feeder and not waste any feed. Always dry and ready for use. One filling lasts several days. Feeds automatically.

Price—(18-inch \$1.25) (24-inch \$1.50) (30-inch \$1.75).



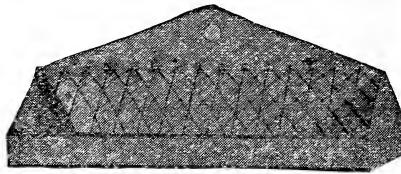
Pilling French Poultry Killing Knife

Every poultry raiser should have one of our Killing Knives. They are made of a finely tempered instrument steel, with nickelized handle; will last a lifetime. Sent postpaid on receipt of 50 cents. Don't wait! Send for one now! Sent securely packed by mail on receipt of price.

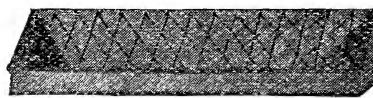
A. & M. LICE KILLING NEST EGGS
Our Lice-Killing Nest Eggs are almost an exact imitation of the real chicken eggs, and yet contain a powerful disinfectant which is guaranteed to expel lice and vermin. Put up in boxes of one dozen each, at 45c. Postpaid, 55c.

CHINA NEST EGGS

We handle only the best grade of glass eggs, strong and durable. (2 for 5c; 25c dozen. Postpaid 35c).



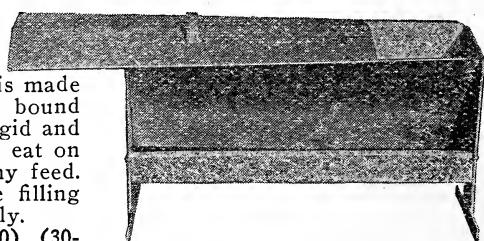
Double Chick Feeder



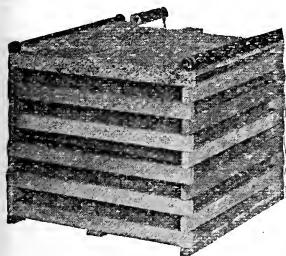
Single Chick Feeder

CHICK TROUGHES

These troughs are made in two sizes, ten inches long and twenty inches long. The bottom of the trough being round in shape, makes it superior to all others, as it can be easily cleaned and prevents food from becoming stale in corners. The grate slide is a feature not to be found in any other



Great Western Dry Mash Feeder



POULTRY SUPPLIES—Continued

Humpty-Dumpty Egg Carrier

One of the handiest egg carriers on the market. This carrier will hold twelve (12) dozen eggs. Can be folded flat for shipment, and is made of strong but light wooden slats fastened with strong steel wires. Very handy and something every poultryman should have. Price, 50c each. Weight, 6 lbs.

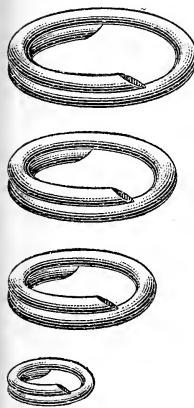
LEG BANDS

SPIR-OL LEG BANDS

KNOW YOUR HENS ON SIGHT

Spir-ol Leg Bands are made in six colors and all sizes, and are put on and taken off like a key ring. Can't drop off. Will not break. Light as a feather. Last a lifetime. 120 combinations from 228 bands. Just the thing to mark the different pens. Handiest band to mark the pullets from the old hens.

Prices—(15c doz.) (25c for 25) (40c for 50) (65c for 100) (\$3.00 per 500) (\$5.25 per 1000), postpaid.

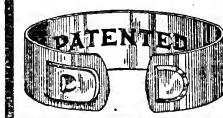


MOE'S SELF-LOCKING LEG BAND

Locked Simply by Pushing It Together.

Please order by breed and whether male or female. (12 bands, any size, postpaid, 15c) (25 bands, any size, postpaid, 25c) (50 bands, any size, postpaid, 45c) (100 bands, any size, postpaid, 75c) (500 bands, any size, postpaid, \$3.50) (1000 bands, any size, postpaid, \$6.00).

MOE'S SELF LOCKING
BAND READY TO BE
USED



SMITH SEALED BANDS

Smith Sealed Bands were put on the market for a purpose. That purpose was to prevent dishonesty in the handling of scored birds and to protect the purchaser of same. Price—(12 for 20c) (25 for 40c) (100 for \$1.50, postpaid).

CLIMAX LEG BANDS

This Band is easy to put on or remove, no tools required. The rings are made of spring brass, and so bent that the tag acts as a clasp holding them securely in place. Made in three sizes. In ordering always mention the variety of fowl wanted for. Price—(15c for 12) (25c for 25) (50c for 50) (75c for 100, postpaid).



FLAT ALUMINUM LEG BANDS

 These bands fit any variety of fowls. Can be adjusted to fit any size leg. Three-inch size for all ordinary breeds; 4-inch size for extra large breeds, including turkeys and geese. (Price—12 for 15c) (25 for 25c) (50 for 50c) (100 for 75c, postpaid).

Chick Brander.—Having so many calls for chick brands we now have secured an aluminum open band for half-grown birds. They are nicely numbered and made so they can be easily adjusted and great convenience to breeders. Price—(10c doz.) (75c per 100).

Pigeon Bands, Aluminum. Price—(Per doz. 10c (100, 80c; postpaid 90c.

Devonshire's Earth Salts for human use, invaluable for rheumatism, eczema and dyspepsia, etc.

Devonshire's Earth Salts. Prevent roup, infertility, dead in shell chicks and debility in poultry.

Devonshire's Earth Salts. The only mineral food for rabbits. Absolutely cures and prevents disease in rabbits.

Devonshire's Earth Salts. The only remedy for mange, abortion, sterility and worms in dogs.

ROUND BOTTOM GRIT AND SHELL BOX

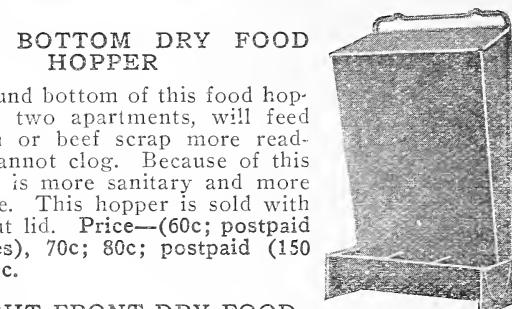
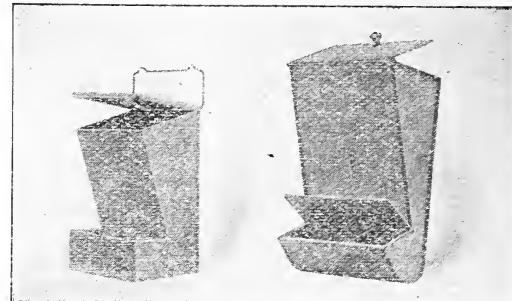
Most grit and shell boxes have square bottom, while this grit and shell box has a round bottom, which prevents the fine particles of shell and grit clogging the corners. Price—(60c; postpaid (150 miles), 70c).

RECTANGULAR GRIT AND SHELL BOX

Owing to the construction of this grit and shell box it is preferred by many because the dust and straw cannot get into the trough as readily as in other styles. Price—(75c; postpaid, 85c).



Round Bottom Dry Food Hopper.



ROUND BOTTOM DRY FOOD HOPPER

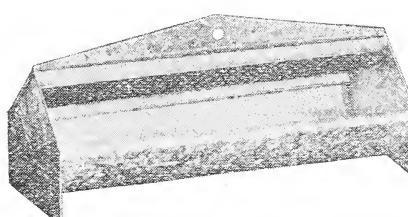
The round bottom of this food hopper, with two apartments, will feed dry mash or beef scrap more readily and cannot clog. Because of this feature it is more sanitary and more acceptable. This hopper is sold with or without lid. Price—(60c; postpaid (150 miles), 70c; 80c; postpaid (150 miles), 90c.

STRAIGHT FRONT DRY FOOD HOPPER

Having a perfectly straight front, the feed positively cannot clog. There is a lip in front and has iron bars to prevent the fowls from wasting the feed. Price—(60c; postpaid 150 miles, 70c).

SLANTING FRONT DRY FOOD HOPPER

This is the regulation old style 3-compartments food hopper offered by most poultry supply houses. It is made of 28-gauge material and is heavier and stronger than most similar hoppers. Price—(75c; postpaid (150 miles), 85c).



Round Bottom Feeder

Slanting Front Dry Food Hopper

This galvanized iron, round bottom, dry mash feeder is especially appropriate for feeding wet mash. It has no seams or crevices to allow feed to lodge and sour. It is easily washed and kept clean. Fowls can feed on both sides. It has a sharp partition through the center, as shown in the cut, preventing birds from fouling and getting into the feed. It can be used as a drinking fountain. Made in two sizes.

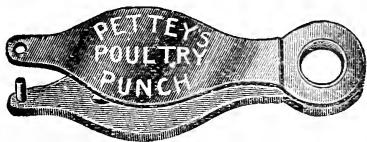
(18-inch 75c; postpaid (150 miles), 85c).
(24-inch 85c; postpaid (150 miles), 95c).

SIX-IN-ONE EXERCISER FEEDER

This Exerciser Feeder is just what its name implies. It is a large hopper supported on four strong iron legs and devised to hold all the food necessary for poultry. The center hopper holds the mixed grain food, and is so constructed that a little agitator, which contains whole corn as bait, can be worked by the fowls so that it will scatter broadcast a small amount each time. It gives the hens the necessary exercise hunting for the grains so that it is impossible to overfeed. Surrounding this center hopper are six compartments made to contain dry mash, beef scrap, grit, charcoal, oyster shells, etc. All are easily accessible for the fowls, and the machine is so constructed that none of the food can be wasted.

Price—20 qt., \$3.75.





Pettey's Poultry Punch. One of the most convenient punches made. It is small and easy to operate, cutting a clean hole every time. Price—20c (prepaid 25c).

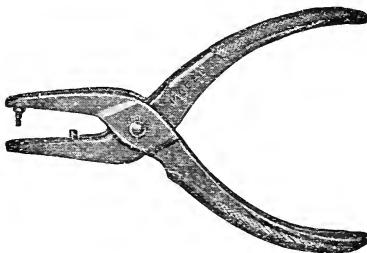
THE ESSEX-MODEL TOE MARKER

To toe mark a chick, a good cutting punch is needed; one making a clean hole. Such is the Model Toe Marker, a high grade tool in every particular. It has a separate stop between the jaws to prevent bruising the web of the foot.



ESSEX-MODEL LICE-PROOF PERCH OR ROOST SUPPORT

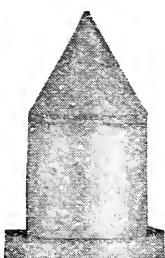
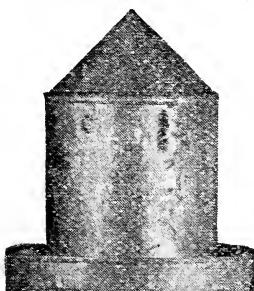
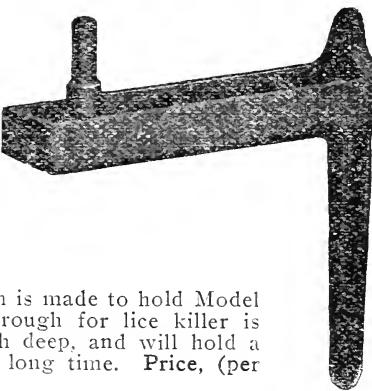
The Essex-Model Perch or Roost Support is a heavy iron bracket in one piece. It is held firmly in place against the wall by two screws. When a pair are in place they will securely support a heavy roost filled with sleeping fowls. The roost fits on an upright metal pin $\frac{3}{8}$ of an inch in diameter. A broad shoulder on this pin just above the trough, which is made to hold Model Lice Spray or other lice-killing liquid. The trough for lice killer is $4\frac{1}{2}$ inches long by $1\frac{1}{4}$ inches wide and $\frac{1}{2}$ inch deep, and will hold a sufficient amount of lice-killing liquid to last a long time. Price, (per pair 40c) (postpaid 50c).



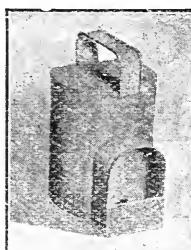
It is well finished, nickel plated, and makes a handsome tool—a perfect marker well worth twice the price asked. Price—35c (postpaid 40c).

POULTRY PUNCH

Easy Marker.—This punch is so simple in construction that it will appeal to all as a practical tool. It makes a clean cut and does not mutilate the web, as do many cheaper punches. Price, (25c each postpaid).

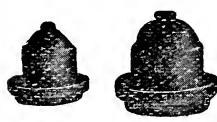


Galvanized Drinking Fountains made of the best galvanized iron, nicely finished so fowls can't turn them over or get on top of fount. Price, (1 qt. 25c, postpaid 30c) ($\frac{1}{2}$ gal. 35c, postpaid 40c) (gal. 45c, postpaid 55c).



Galvanized Drinking Fountains FLAT BACK WALL FOUNTAINS

These are made of No. 28 gauge steel and are much better and stronger than most other fountains of this style now on the market. A hood over the trough prevents dirt from getting into water. Price—($\frac{1}{2}$ gal. 50c, postpaid 60c) (2 gal. 75c, postpaid 85c).

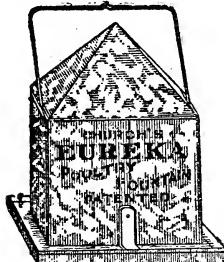


SANITARY FOUNTAINS (STONE)

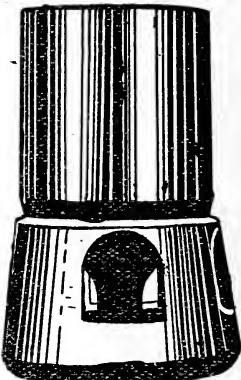
These founts are made of clay glazed inside and out. Price—(1 qt. 25c) ($\frac{1}{2}$ gal. 35c) (gal. 45c).

PIGEON FOUNTAIN

This fountain is made especially for pigeons. It is perfectly sanitary and made so the pigeon cannot get in the water. Easy to fill and keep clean. Price—($\frac{1}{2}$ gal. 45c) (gal. 60c).

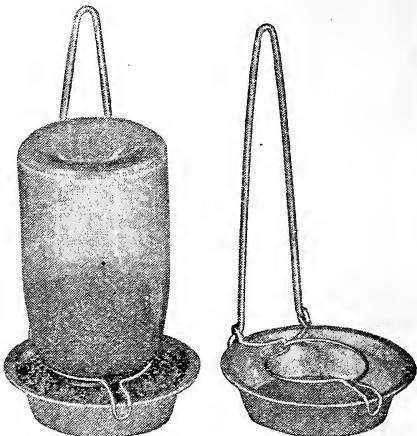
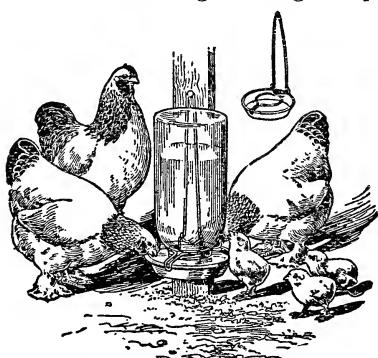


Eureka Drinking Fountain.—This fountain is made of galvanized iron, with pyramid top. It has a bail, with which to fasten it against the house or post, suspended high enough to prevent the fowls from scratching any filth into the pan, thus keeping the water pure. Price—(1 qt. 15c, postpaid 25c) ($\frac{1}{2}$ gal. 30c, postpaid 40c) (1 gal. 40c, postpaid 50c).



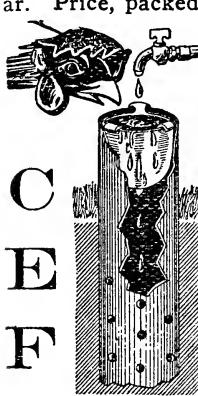
OUR ALL RIGHT POULTRY FOUNTAIN

This fountain has just lately been introduced among our poultry breeders and endorsed as the most sanitary and useful of its kind. The above cut shows the All Right Fount with grain in it used as an automatic chick feeder or can be used for a drinking fount. It is so arranged that you can use a two-quart Mason fruit jar as a reservoir which gives larger capacity.



This fount has a hanger. You could easily afford one for small grains and water. This fount is made of the best heavy galvanized iron. We do not furnish the glass jar. Price, packed ready for shipment, 20c. Postpaid, 25c.

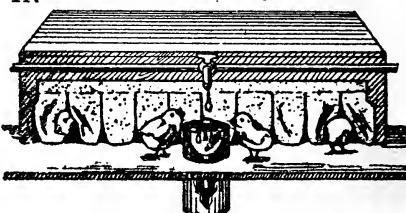
THE "C. E. F." FOUNTS ARE VERY DESIRABLE IN BROODER PFNS



With these founts the chicks at all times have absolutely fresh and clean water, which is a very important item in the raising of healthy, vigorous stock. They save lots of work every day by making unnecessary the daily chore of watering the chicks.

For your convenience in ordering shipment via Parcels Post we show weight of each item. Prices are f. o. b. Los Angeles, Cal.

Ask for free circular.

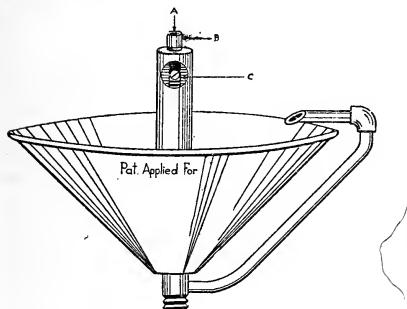


Article	Weight	Price
Metal cup...	2 oz.	30 cents
Drain pipe...	28 oz.	30 cents
Faucet	5 oz.	35 cents
Reducer	2 oz.	5 cents

Price with Metal Cup without Faucet, 60c. Prepaid (150 miles) 75c.

THE AUTOMATIC WATER FOUNTAIN

The Fount they are all talking about. When you see it you will surely place it in your yards.



The fountain can be removed and easily cleaned. A child can operate them. It's a pleasure to have one. No unnecessary waste of water, and your Water Bill will be reduced to a minimum. Every fountain will pay for itself within one year. They do away with that hard job of "Lugging Water." You may leave your fowls but they will always have water. These fountains are up to date and the most sanitary known. Every fountain is guaranteed and replaced if found defective in any way.

They are not only made to sell but sold to wear as well, and wear they will for many years with proper care.

Any person with a pipe wrench can install them, and they are easily adjusted to suit conditions.

AUTO FOUNT + TIME — MONEY

For the Poultryman.

Price \$1.50 each. Weight $2\frac{1}{2}$ lbs. Price \$1.60 by Mail. Three Founts, \$4.20. Six Founts, \$8.10. Twelve Founts, \$15.

TYCOS INCUBATOR HYGROMETER

MOISTURE REQUIREMENTS

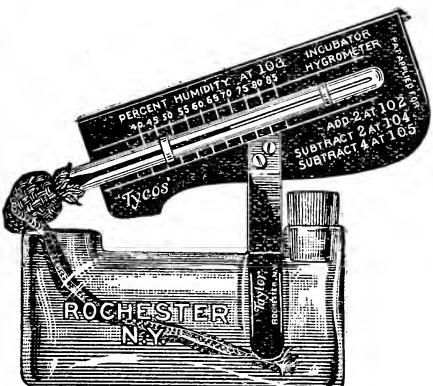
The amount of moisture required, during the period of incubation, varies from 65% to 53%. For the convenience of our friends and patrons we give the following table of the percentage of moisture best adapted to each week of incubation:

First week there should be about 65% of moisture present;

Second week there should be about 60% of moisture present;

Third week there should be about 55% of moisture present;

At the time of hatching, about 50% of moisture. Price \$1.50 postpaid.



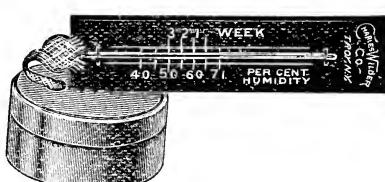
Tycos Hygrometer

WILDER MOISTURE GAGE NO. 2

The figures on the bottom row of the scale show the percentage of moisture, figured from the tables published by the United States Department of Agriculture, and are exact for a machine running at 103 degrees, this being the most generally accepted temperature for hatching. A study of this table shows that the difference in the percentage of humidity in a temperature one degree higher or lower (102 degrees or 104 degrees) is so slight that there is little if any effect on the general results.

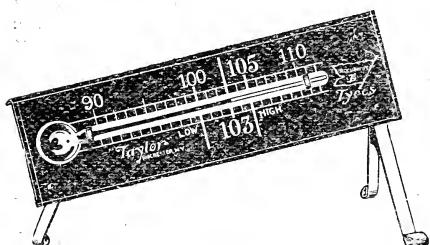
The spaces on the scale marked "1st, 2nd and 3d week" are for the use of those operators who reduce the amount of moisture at these stages of incubation.

As before stated, the figures on this Gage are exact for a machine running at a temperature of 103 degrees and correct enough for practical purposes at 102 degrees or 104 degrees. Price \$1.00 Postpaid.



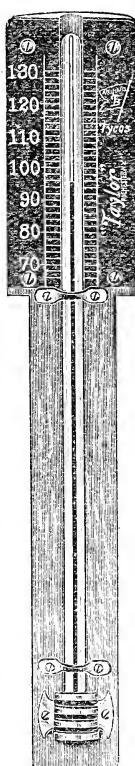
Wilder Moisture Gage No. 2

INCUBATOR AND BROODER THERMOMETERS

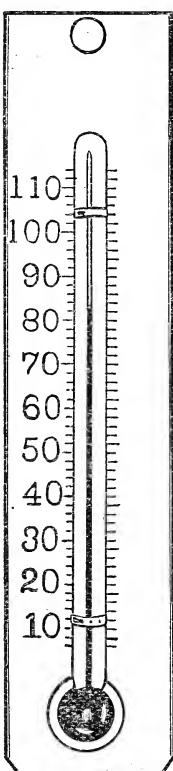


No. 3—75c Postpaid

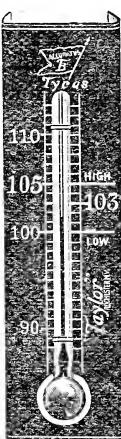
"drawback" in any position from perpendicular to horizontal. They are put through a special process which insures the "draw back." Consult us as to selecting a thermometer to suit your incubator or brooder.



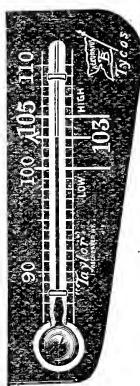
Half Round
Brooder
Thermometer
75c postpaid



Fiat Brooder
Thermometer
35c postpaid



No. 4—65c
Postpaid



No. 2—75c
Postpaid



No. 1
\$1.00
Postpaid

Our Brooder Thermometers are in two styles. One is Half Round with enclosed tubes to be inserted into top of Brooder and read without taking thermometer out. The other style is Flat and made of metal. This is hung on the inside of the Brooder Box.

Both thermometers are Tycos brand and are guaranteed to be the finest manufactured and absolutely correct.

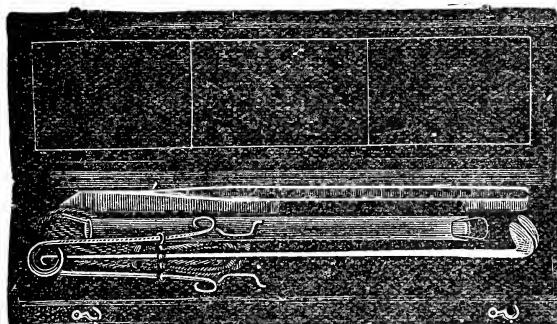
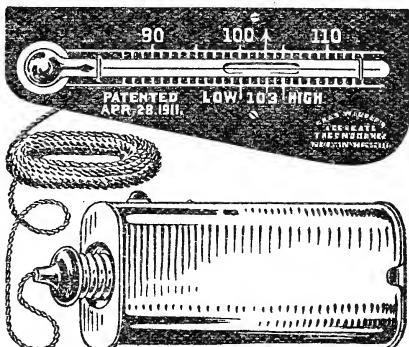
We carry a complete line of Thermometers for Hot Houses, Hot Beds, Dairies, etc.

Hot-bed Thermometers, metal back.....	Price \$2.00 postpaid
Hot-bed Thermometers, all metal.....	Price \$1.00, postpaid \$1.15
Hot-bed Thermometers, wooden case, enclosed.....	Price \$1.50 postpaid
Hot-bed Thermometers, wooden case.....	Price \$1.00 postpaid
Self-registering, metal case	Price \$2.50 postpaid
Fahrenheit Thermometer	Price 30c postpaid
Dairy Thermometer	Price 30c postpaid
Churn Thermometer	Price 50c postpaid
Pasteurizing Thermometer	Price \$1.00 postpaid

THERMOMETERS—Continued

WILDER'S ELECTRIC LIGHTED THERMOMETER

This thermometer is one of the most convenient thermometers known. To any one not having a good eyesight it is very convenient, as by pressing the connection it produces a bright light exactly behind the high and low mark that is registered on the thermometer, enabling the operator to see the scale in any cellar or dark place the incubator may be placed. This thermometer with battery and connecting cord complete. Price, \$2.00 Postpaid.



The Pilling Special Caponizing Set

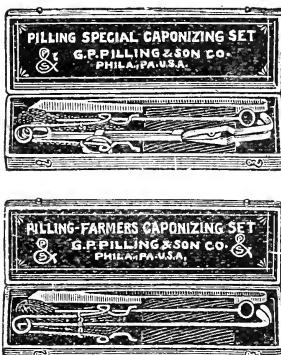
Price, complete in velvet-lined oak case, prepaid, \$4.00. much loss. Complete instructions with each set. operation can be easily done by any beginner without

This set contains the latest patented extractor. The operation can be easily done by any beginner, without much loss. Complete instructions with each set.

Pilling-Farmers Caponizing Set

Put up in fine black case. Complete set of tools, \$2.50 prepaid.

Patent Farmer's Caponizing Set.—The art of caponizing is quite simple, and the operation can be performed in five minutes. The best time to caponize cockrels is from six weeks to four months of age. Price, \$3.00 per set, postpaid.

**FARMER MILES' CAPONIZING SET**

This set is made of very best material used by all surgeons and considered to be the easiest and the most successful caponizing set ever manufactured. This is put up in Morocco leather case and all tools made of silvered steel with a full set of instruments. Price, \$10.00, postpaid.

ROUPE SYRINGES.—All glass in wooden case. 10c postpaid.

SULPHUR CANDLES.—Price 10c postpaid.

Powder Guns, Brass—10c postpaid.

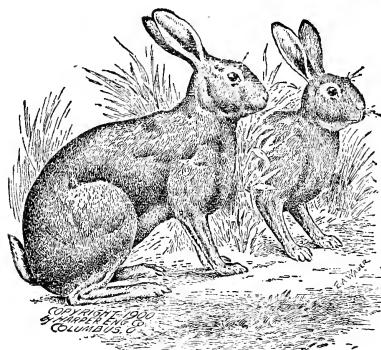
Powder Guns, Jumbo—25c postpaid.

Powder Guns, Floradora, 25c postpaid.

Devonshire's Earth Salts. The only preventive of abortion, mange, bairness, poor or worthless milk in cows and brood mares. Absolutely cures mange.

Devonshire's Earth Salts. Insure strong growth in calves, fowls and chicks. The only known mineral food for all growing stock.

RABBIT SUPPLIES

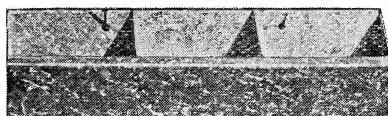


On account of our increasing demand for Rabbit Supplies we have added, to our supply department, a complete line of the up-to-date fountains, feeders and remedies for Rabbits, as illustrated in the following:

Rabbit Feeders.—These feeders are made of the best galvanized iron in three or more compartments, according to their length. Each feeder is constructed with wire hangers to fasten to the hutches, so it cannot turn over and waste feed. These are made especially for alfalfa hay.



- (12 in. 30c) (postpaid, 150 miles, 35c)
 (15 in. 35c) (postpaid, 150 miles, 40c)
 (18 in. 40c) (postpaid, 150 miles, 45c)



Rabbit Compartment Wall Pans.—These wall pans are built for hutches that contain several rabbits. They are made of galvanized iron, put up in three and four compartments. They can be fastened to the wall of the hutch as shown in the cut. They are perfectly sanitary and are easily kept clean.

- (15 in. 3 compartment, 35c) (postpaid, 150 miles, 40c)
 (18 in. 4 compartment, 40c) (postpaid, 150 miles, 45c)

Flanged Edge Feeders.—These are made of stoneware, nicely glazed with a flanged edge for feeding rolled Barley and other grains.



Rabbit Feeders

The flanged edge prevents the rabbit from throwing out the grain and wasting it. They come in two styles, Brown Glazed and White Glazed. Prices as follows:
 No. 1, 10c each, 3 for 25c, 1 dozen, 90c. No. 3, 15c each, 1 dozen, \$1.50.
 No. 2, 10c each, 1 dozen, \$1.00. No. 4, 20c each, 1 dozen, \$1.75.
 Please mention when ordering, whether Brown or White Glazed is wanted.

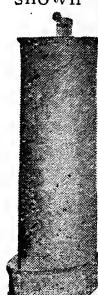


Rabbit Drinking Fountains

1 pt. 10c each, 3 for 25c; per dozen.....	\$.90
1 qt. 10c each; per dozen	1.00
½ gallon 15c each; per dozen.....	1.50
1 gallon 25c each; per dozen	2.75

These founts can be used for chicken founts where dripping water is available, as they are open and sanitary.

Galvanized Rabbit Drinking Fountain. This fountain is filled from the bottom and feeds automatically in a small pan preventing the rabbits from fouling the water. Can be hung on the inside of the hutch, as shown in cut. Made in one size only. Price 50c, postpaid 150 miles, 60c.



Rabbit Drinking Fountains.—These fountains are made especially strong and durable for rabbits. The wide bottom prevents turning over and are not easily broken. They are made in four sizes, as shown in cut.

RABBITS

The climatic conditions of the Pacific Coast seem to furnish ideal conditions for the breeding of hares for meat and for fancy purposes. We know of some instances where men and women are making a good living by simply breeding and raising rabbits.

While rabbits may be kept in any old kind of a box or place we deem it advisable to provide a good clean home for them. They must be protected from drafts and also the heat of the summer sun. They can stand lots of cold if kept in a place free from dampness and drafts.

Feeding is the most delicate part of hare raising. Guard against sudden changes in food. Hares will eat almost anything that is fed to them but dry alfalfa and rolled barley are considered best for them. Cracker crumbs and a piece of carrot once a day is health-giving.

Feed rolled barley or crackers in the morning after watering, and alfalfa with the carrot or some other root at about 3 or 4 o'clock in the afternoon. Study each individual hare and feed accordingly. Some will require a little extra nourishment such as bread and milk. Green food such as lettuce, cabbage, cauliflower, green alfalfa, etc., are not necessary and are often very harmful.

THE PACIFIC COAST RABBIT BOOK is a good guide for breeders of hares and rabbits, giving pointers as to breeding, feeding, caring for the young and also how to keep your stock free from disease and what to do in case they become diseased. Price 25c, postpaid 30c.

CALDWELL BROS. SANITARY HUTCHES

Inventors, Owners, Manufacturers. (Patent pending.)

Will revolutionize rabbit keeping. Don't let your rabbits die from the heat; use these hutches. It is with satisfaction that we present our line of hutches. We have three makes; two for outdoor; one for indoor use. Eliminate the disagreeable features of rabbit keeping. Well constructed hutches of a type that assures comfort and protection to the rabbits at all times. They are portable and self-cleaning. They are odorless and clean and take up a minimum of your time and attention. Produce ideal conditions for perfect health.

The rabbits are not over a germ-laden surface. THINK THIS POINT OVER. Invented and used by practical rabbit breeders, who realize their necessity; use these hutches and you will realize that you are keeping better rabbits with more ease than heretofore, and appreciate the absolute necessity of the continued use of these hutches on your plant at a nominal cost.

We recommend all rabbit breeders to write for information on these hutches. Prices furnished on application.

Caldwell's Condition Powder.—Promoter of health. This Condition Powder is made from ten ingredients, carefully compounded. Pays feeders 15% to 25% extra net profit in fattening stock, because it aids digestion and assimilation, so that each animal obtains more nutrition from the food eaten. Used by practical rabbit breeders. Large package 35c postpaid.

Caldwell's Slobber Remedy.—This truly wonderful remedy is used by practical rabbit breeders. The reason is that it CURES. The symptoms can be detected almost instantly by a constant flow of saliva which runs from the mouth, wetting the lower jaw and running down the chest. This remedy should be kept on hand so that you do not have to wait and let your rabbits die before applying it. Package 25c postpaid.

Candwell's Ear Canker Remedy.—A preventative and cure. Don't worry; this will cure your rabbits. The ingredients of this remedy are specially compounded for the cure of ear canker. The rabbit generally holds its head to one side and shakes its head as if something were in the ear. The ears should be examined carefully and apply a few drops of this remedy. Package 25c postpaid.



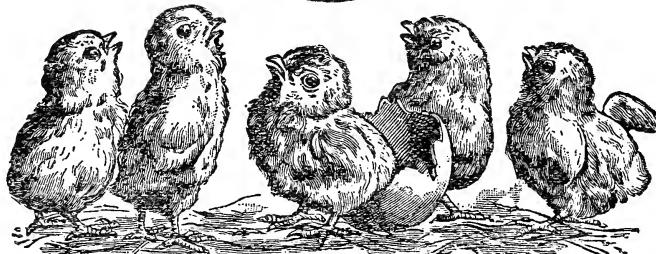
NO MIXING
NO MASHES
NO SICK CHICKS



T W E N T Y V A R I E T I E S
D I F F E R E N T G R A I N S
A N D S E E D S F O R T H E
H E A L T H O F
B A B Y C H I C K S

O N C E T R I E D
Y O U W I L L U S E
N O O T H E R

Fed Dry and always ready
STEINMESCH
CHICK FEED



It is a mistake to feed young chicks soft feed—they do not need it any more than the old hens, and cannot stand it half so well. It is not the soft feed that makes the trouble alone, but the way it is fed. In most cases it is thrown on the ground and gets dirty and filthy, and for that reason is not healthy. In a great many cases it is put on a board or a platter and kept clean, but more is loaded on the board or platter than the chicks will eat at one time; in the course of an hour it gets sour, it is indigestible, and for that reason is not healthy. In addition to all this, there is the trouble of mixing the feed.

Steinmesch Chick Feed is dry and always ready for use, requiring no mixing whatever. Price, (6 lbs. 25c) (100 lbs. \$3.00).

A. & M. SUPERIOR CHICK FEED

Our trade have often called for a coarser baby-chick feed and to supply this demand we are making a feed much coarser than the Steinmesch Chick Feed. It is composed of cracked grains, viz.: Kaffir Corn, Wheat, Millet and other seeds mixed in proper proportions for a coarse baby chick feed. All seeds are carefully selected from pure sweet grain. Price—Per (100 lbs. \$3.00).

Conkey's Roupe Cure.—Per box 50c and \$1.00.

Church's Roupe Cure.—Per bottle 25c.

A. & M. Roupozone Roupe Cure. Per bottle 25c and 50c.

Lambert's Death to Lice.—Per pkg. 10c, 25c, 50c and \$1.00 postpaid.

Lambert's Ointment.—Per box 10c and 25c postpaid.

Hess & Clarke's Instant Louse Powder.—Per pkg. 35c and 60c postpaid.

Hess & Clarke's Pan-a-cea.—Per pkg. 35c and 85c; pail \$3.50.

Creozozone.—Per (quart 35c) ($\frac{1}{2}$ gal. 60c) (gal. \$1.00).

Spratt's Dog Biscuit.—Per pkg. 25c postpaid.

Chicken Chili, Fine.—Per lb. 15c, postpaid 25c.

Chicken Chili, Coarse.—Per lb. 10c, postpaid 20c.



MIDLAND POULTRY FOOD

THE FOOD THAT GIVES SURE RESULTS IN EGG AND MEAT.
ONLY BALANCED RATION ON THE MARKET

Midland No. 1.—For baby chicks, \$2.25 per sack.

Midland No. 2.—Growing chicks, \$2.25 per sack.

Midland No. 3.—Fattening chicks, \$2.25 per sack.

Midland No. 4.—Will produce more eggs and give better results than any other food, \$2.00 per sack.

These special foods which we prepare are composed of the very best material obtainable and as carefully and accurately mixed as it is possible to make them. They are complete food and will produce specific results, each for its purpose and no other. We want you to become an established customer of ours. We want your trade, be it little or much. There is only one way we can secure it, and that is by sending you material that will do what we claim for it.

ALFALFA MEAL

Green food is absolutely necessary for poultry. No one can afford to be without it. Fed with soft feeds and beef scraps make a great egg food. Price, 10-lb. bag, 25c.

BEEF SCRAPS

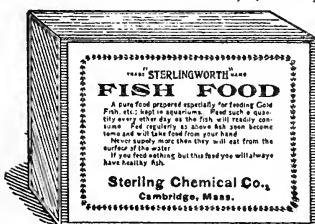
Our beef scraps are a fine clean preparation made from pure inspected meat. No scavenger product in our beef scrap. One of the essentials in egg production. Price, \$3.50 per 100 lb. sack.

Armour Beef Scraps, Granulated, all sizes, \$3.25 per 100 lbs.

Swift's Beef Scraps.—These scraps are guaranteed to be of pure meat and blood, inspected by the Government and perfectly free from scavenger product. Price, 100 lb. sack, \$3.50.

A. & M. Blue Ribbon Meat Scraps.—These scraps are manufactured in Los Angeles. Have been carefully inspected and free from all foul meat and blood. They are made in a granulated form, coarse, medium and fine. Price, per 100 lbs., \$3.25.

A. & M. Superior Fish Meal.—Our fish meal is made from clean fresh fish, cooked, dried and ground. Especially prepared for fowls. Among our leading poultry men it is considered a great egg producer. It is put up in 80 lb. sacks. Price, \$2.25 per sack.



STERLING WORTH FISH FOOD.

An imported cereal food prepared especially for feeding gold fish. Each wafer is $2\frac{3}{4} \times 3\frac{3}{4}$ inches and about the thickness of blotting paper.

Price—Per box (20 sheets), 10 cents, postpaid.

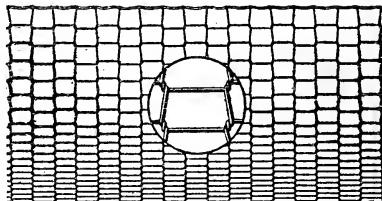
WIRE FENCING FOR POULTRY YARDS

The Warner Junior Poultry Fence

Warner Junior Poultry Fence is made of No. 18 galvanized wire with a No. 14 wire top and bottom, stay wires placed $4\frac{1}{2}$ inches apart at the bottom of the fence and gradually widen as the top is reached.

Put up in 10 rod rolls.

3 ft. wide \$3.50 per roll 4 ft. wide \$4.25 per roll
5 ft. wide \$5.00 per roll 6 ft. wide \$5.50 per roll



The Warner Junior Poultry Wire is a closely woven fence that will give the best results at a very reasonable price. It embraces all the popular features of the heavier Warner Poultry Fences, having the interlocking tie to hold it rigid, and close graduated meshes which effectively turns the smallest chickens, at the same time reduces the cost of completed fence by not requiring a top or bottom board.

We carry all other grades of wire, but recommend to our customers to try the Warner, Jr., as they will find it the best and strongest and cheapest wire they can buy. The above prices are all F. O. B. car, Los Angeles, Cal.

VICTOR STEEL WIRE NETTING FOR POULTRY, RABBIT AND HOG FENCE

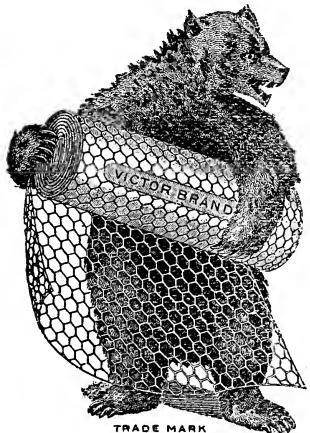
This wire is galvanized before weaving, so it will not crack and rust at the twists.

It is made of full-gauge, hard-drawn steel wire, having great tensile strength, and heavily galvanized, insuring maximum length of life.

It has three strands in each selvage that will stand stretching, and the netting can be put up tight and smooth.

Our prices are as follows. Per roll 150 ft.:

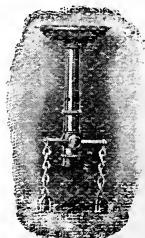
1 foot high 2 inch Mesh.....	\$.70
2 foot high 2 inch Mesh.....	1.30
3 foot high 2 inch Mesh.....	1.95
4 foot high 2 inch Mesh.....	2.55
5 foot high 2 inch Mesh.....	3.20
6 foot high 2 inch Mesh.....	3.85
1 foot high 1 inch Mesh.....	\$ 1.65
2 foot high 1 inch Mesh.....	3.15
3 foot high 1 inch Mesh.....	4.90
4 foot high 1 inch Mesh.....	6.40
5 foot high 1 inch Mesh.....	8.00
6 foot high 1 inch Mesh.....	9.60



BLUE FLAME GAS BURNER

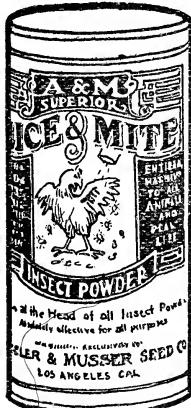
This burner was designed and manufactured by us to meet the demand for a blue flame burner suitable for incubator and brooder work. This burner may be turned low without popping out and may be regulated and set to meet the varying pressure of gas in different localities. It may be used with either city or natural gas.

Price, \$1.00 postpaid.



A. & M. TRAP NEST

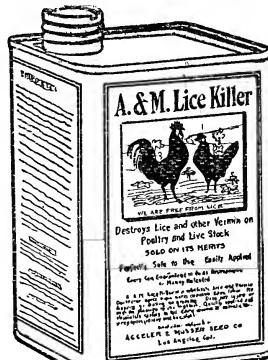
This nest is made of heavy galvanized iron with an automatic catch and when set ready for use the door is wide open. As soon as a hen enters, the door drops behind her and she is enclosed so that no other bird can enter. It is perfectly sanitary and clean. Breeders will appreciate this nest as it is light and does not frighten the fowls when set. Price \$1.25.



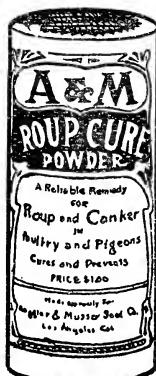
A. & M. Lice and Mite Killer.—Intended especially for killing lice on chicks, hens and domestic animals. Price 20 oz. cans 25c; postpaid 30c; 50 oz. cans 50c; postpaid 60c; 100 oz. cans \$1.00; postpaid \$1.10.



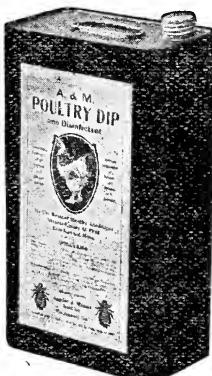
A. & M. Roupozono.—Sure cure for cholera, canker, sore heads, chicken pox. Price 8 oz. bottle 25c; 16 oz. bottle 50c. Cannot be mailed.



A. & M. Liquid Lice and Mite Killer.—No dipping, no dusting, no greasing; absolutely certain to kill every species of parasite on poultry or live stock. Price 1 qt. 35c; $\frac{1}{2}$ gal. 60c; 1 gal. \$1.00; 5 gal. \$4.00.



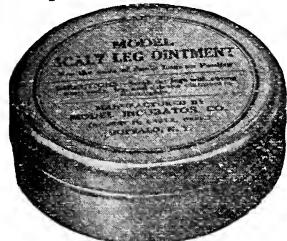
A. & M. Roupe Powder.—Will cure colds in three or four days. Price, Box 25c, postpaid 35c; 50c size postpaid 60c; \$1.00 size postpaid \$1.10.



A. & M. Poultry Dip.—The greatest remedy for dipping poultry and destroying all vermin. Price $\frac{1}{2}$ gal. 75c; 1 gal. \$1.25.



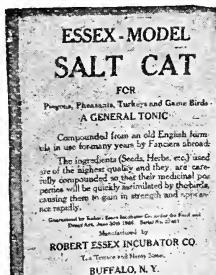
Head Lice Ointment.—In cases of lice on the head far excels any other remedy. Price per box 25c, postpaid 30c.



Scaly Leg Ointment.—Prepared in paste form; sure cure for the worst cases scaly legs. Price 25c, postpaid 30c.

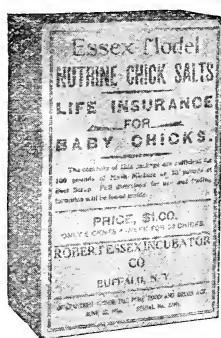


Roupozone Tablets.—In tablet form; easy to apply. 25 tablets 50c, postpaid 55c.



Salt Cat.—Invaluable all round tonic for all kinds fowls, insuring great increase of strength and vigor. Price per package 25c, postpaid 30c.

ESSEX NUTRINE CHICK SALTS.



er, and a wonderfully effective food-salt. Costs five cents a week for fifty chicks, and takes the place of bugs, worms and flies which chicks in small enclosures cannot get. It is to be fed in either dry or wet mash. Price, 2 lb. pkg., sufficient for 40 lbs. mash, 50c; postpaid, 60c.

STERLING WORTH ANT DRIVER.

So far as we have been able to observe, our Sterlingworth Ant Driver is effective against most of the known species inhabiting the temperate zone. But the small red and black ant are the ones most troublesome in this climate. These are invariably driven by it. Price 25c, postpaid 30c.



STERLINGWORTH BIRD TONIC

A remedy in liquid form for those troubles arising from colds or exposure of canary birds, parrots and cage birds generally. It is an old reliable preparation and has been used for years with good results. Price 25c, postpaid 35c.



Our Bird Seed Mixture is clean, healthy and well balanced. The birds eat all of it. Price—(15c per lb.) (25c postpaid) (2 lbs. 25c; postpaid 35c).

Nutrine Chick Salts supply the need of the chick for animal and mineral food which is often lacking in foods fed to chicks when in confinement. It builds bone, sinews and feathers. It aids digestion and prevents diarrhoea. These salts are not a purgative, but a tissue build-

STERLING WORTH SONG RESTORER



No lover of the canary should be without this health and song stimulator. It is a wonderfully invigorating tonic for canary birds, gold finches, parrots and all seed-eating birds. It is for use in small quantities in connection with the daily food, and supplies the elements so necessary to healthy bird life. It restores to their natural notes, birds which have lost their song from exposure to cold or from excessive moult. For Price 15c, postpaid 20c.

STERLING WORTH DIARRHOEA REMEDY



A positive cure and preventative for Diarrhoea, including that diagnosed as White Diarrhoea, seems too good to be true; for this scourge has driven more poultrymen out of business than any other disease. Millions of chickens, representing thousands of dollars and blasted hopes of a profit and a livelihood from poultry-raising, die yearly from diarrhoea, which could be saved if Sterlingworth Diarrhoea Remedy was used. Price 50c, postpaid 60c.

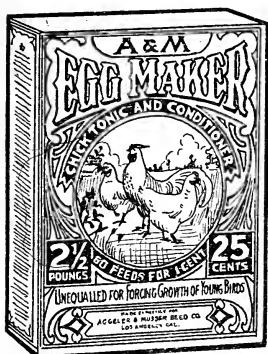
“BITTER LICK”

This is a composition of Herbs and Salt, made in the form of a brick. Can be fastened in stall of the horse in easy access, and is one of the greatest tonics ever fed to an animal. You need no condition powder when you have “Bitter Lick” in reach of your horse. Price, (per brick 25c, postpaid 65c) (per brick holder 15c, postpaid 35c).

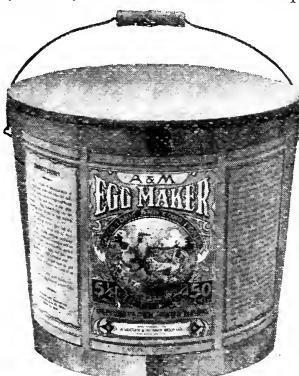


A. & M. EGG MAKER

This Egg Maker is composed of Granulated blood (deodorized), powdered roots, herbs, salts and spices in kind and proportion as most needed and best adapted to the health productiveness of the domestic fowl. Only pure dried blood is used in this preparation. It is the most highly concentrated form of meat food, each pound being equal to 16 lbs. of fresh beef. It contains no bran, shell, sand or other cheap filler and is the largest value of any egg maker on the market. It supplies all meat food and other material necessary for laying and breeding stock and growing chicks, except common grain food, gravel or grit and water.



To obtain the best results, fowls must be kept in a healthy condition and, in order to achieve this, a good tonic such as this should be fed regularly. This tonic keeps digestive apparatus, etc., in perfect condition and is unsur-



passed by any other preparation of its kind on the market. It is highly concentrated and should be fed only according to directions. Never feed it alone.

Directions.—Mix a couple of tablespoonfuls of the Egg Maker with soft mash for each 15 or 20 fowls, the morning meal being the best time, and once a day often enough, the Egg Maker being very invigorating and effective in egg making when fed in this manner.

For young chicks give half the quantity and the result will be most gratifying. Under ordinary conditions the above mentioned quantities will be found sufficient; but if the birds are in poor or unhealthy state, the dose may be given twice daily instead of once.

Keep gravel, oyster shell or grit and clean water before the fowls at all times. Having secured good results, recommend the Egg Maker to your friends.

Price, (Pkgs. 25c and 50c) (pails, 25 lbs. \$5.00).

Guaranteed under the Pure Food and Drug Act, June 30, 1906, Serial No. 4237.

PRATTS POULTRY REGULATOR (Formerly Called Pratts Poultry Food)

This is the original Poultry Regulator, in use by the most successful poultry-raisers everywhere.

It is entirely different from Pratts Animal Regulator. It is composed of valuable imported roots, herbs and barks so blended as to make a perfect regulator, tonic and stimulant, suited to the constitution of the poultry.

Pratts Poultry Regulator overcomes the difficulties met by every poultryman by regulating the blood, bowels and digestive organs of all fowls. Thus it keeps the birds in robust health, produces good, rich blood, healthy fat, sturdy muscles, strong bones, red combs and wattles, brilliant feathers and fertile eggs. It stands unrivaled as an egg-producer, and when regularly used, the hens lay throughout the year.

It prevents diseases and cures chicken cholera, gapes, roup, rheumatism, expels worms, prevents leg weakness, egg-eating and unnatural habits. It will also greatly improve turkeys, geese, ducks, pigeons and guineas—making them grow bigger and quicker.

Pratts Poultry Regulator costs but a few cents a week for a big flock, and it pays its cost many times over in the results it produces. Results are immediate and permanent.

Be sure to ask for Pratts Poultry Regulator; made by "Pratt Food Co."—the original and best Poultry Regulator in America. Do not accept substitutes or imitation preparations.

25-lb. pails \$2.50, also in small packages, 25c, 50c, \$1.00.

PRATTS ROUP CURE

is a scientific preparation compounded into a fine powder, and when mixed with water, is absorbed by the blood at once, purifying the system, allaying inflammation and reducing the fever. It not only cures, but prevents roup, colds, canker, catarrh and diphtheria, and should be given to all fowls frequently to keep diseases away.

Pratts Roup Cure is quite different from many so-called roup cures, which may cure a cold, but never a genuine case of roup.

Extra large boxes, 50c and \$1.00; smaller size, 25c.

DEVONSHIRE'S EARTH SALTS

ESPECIALLY FOR POULTRY, RABBITS, CATTLE AND HORSES

Major Devonshire pointed out in 1905 that it would be necessary to artificially manufacture and supply the Earth Salts to domestic stock, poultry and dogs kept in confinement or on limited range, and the formula, on which Devonshire's Earth Salts are based, is the work of a leading Agricultural Chemist.

The consistently favorable reports, during the past eight years, of Agricultural Chemists, Veterinarians and Stock and Poultry Experts, in many parts of the world, as to the unique value of these Earth Salts, have established Devonshire's Earth Salts as a great discovery in Agricultural Science.

Some Diseases Caused by a Shortage of Earth Salts, Available to Stock and Poultry.

(1) **Horses, Cattle, Pigs, Sheep and Dogs.** Debility, abortion, sterility, mange, insufficient or worthless milk to suckle the offspring, milk fever, etc.

(2) **Poultry.** Poor egg yield, dead-in-shell chicks, weakling chicks, infertile eggs, sterility in male birds, poor feathering, leg weakness, debility, leading to the attacks of lice, roup, diphtheria, catarrh, diarrhoea and other diseases, which are always preceded by a debilitated condition, due to a shortage of Earth Salts, if the management is in other respects rational.

Summary. If the germicides (or killers of disease germs which settle in the blood) are healthy, disease is impossible. Earth Salts, as combined in Devonshire's Earth Salts, enable these germicides to functionate efficiently, and are therefore the lixir vitae—the most vitally important factor in the feeding of stock and poultry in confinement.

Additional Directions as to How to Feed Devonshire's Earth Salts

Poultry—Matured Birds. Morning. Feed a mash of 2 parts, by weight, bran (light or heavy), and one part, by weight, cornmeal; add 7 per cent beef scrap and the Earth Salts, in the proportion of one tablespoonful to every 5 lbs. mash; mix dry and then dampen slightly. Mid-day. Give green food, if there is no natural supply available at all times to the birds. Afternoon. Feed a different grain every day, part in litter and the remainder last thing at night, on the ground. Barley, oats, Egyptian corn, wheat and cracked corn, etc., may be used on successive days, or the wheat may be given every 2 or 3 days, if preferred. Light breeds require about 4 ounces per bird per day, and the heavy breeds from $4\frac{1}{2}$ to 5 ounces per bird per day, given as to $\frac{1}{2}$ as mash and $\frac{1}{2}$ as grain. Thus 1,000 White Leghorns require about 125 lbs. mash and 125 lbs. grain daily.

Small Chicks. First day. Feed bread crumbs with the Earth Salts sprinkled on them and moistened with milk or water. Eggs broken into a pan and stirred with the bread crumbs until cooked may be added. After the first day, let the chickens scratch out all their food, from deep litter. Put down 2 inches of litter and cover with chick feed, and then another 2 inches of litter, covered with chick feed, until there are 4 layers of feed and litter respectively. Feed beef scrap all the time, in a hopper and not mixed in the chick feed. Give daily a mash as for grown hens, last thing at night, but without mixing any beef scrap with it. This mash will give the chicks the Earth Salts required and may be continued regularly, until six weeks old, then feed as for grown hens.

Dogs. A convenient way to feed dogs is to put $\frac{1}{2}$ teaspoonful of the Earth Salts daily in the feed. Where puppies at weaning time feed out of one dish, a $\frac{1}{2}$ teaspoonful in the food in the dish will be about right. The Earth Salts are quite harmless, but if too much is given, the dogs may refuse the food.

Rabbits. Cures Slobbers, Snuffles, Mange, Ear Canker, all digestive disturbances, refusal to eat, Abscesses and difficulty in Moulting. Devonshire's Earth Salts for stock and poultry are put up in packages of three sizes.

Devonshire's Earth Salts increase the milk yield of cows.

Devonshire's Earth Salts are assimilated by all living things in the same way as the natural salts in the foods.

Devonshire's Earth Salts. Tuberculosis is due to a shortage of the earth salts in the body.

Price, 1-lb. packages 50c, postpaid 55c, within 150 miles.

Price, 2 $\frac{1}{4}$ -lb. packages \$1.00, postpaid \$1.10, within 150 miles.

Price, 10-lb. packages \$3.00, postpaid \$3.15, within 150 miles.

In bulk, prices on application.

WHY DEVONSHIRE'S EARTH SALTS FOR HUMAN USE? BECAUSE THEY SUPPLY THE SUBSTRATE

BECAUSE THEY SUPPLY THE SHORTAGE IN YOUR FOOD

The majority of soils are deficient in mineral matter and therefore the plants and grains grown therein are also deficient and we humans who live on these plants and grains will sooner or later suffer from this shortage and disease will follow. As far as the average person is concerned, all the diseases from which he or she suffers are due to shortage of the earth salts in the food over a more or less prolonged period of time. Devonshire's Earth Salts for human use are the only known means of supplying this shortage. They prevent and cure disease.

Tuberculosis.—On August 4th last, Major Devonshire set out in a letter to the Times of Los Angeles that Tuberculosis in mankind is due to starvation of the earth salts in the body and that Devonshire's Earth Salts would prevent tuberculosis absolutely and cure it except perhaps where the disease was in the last stages. The accuracy of this diagnosis has never been disputed by any medical or other expert.

Rheumatism is due to an excess of acids in the body. Devonshire's Earth Salts alone enable nature to absorb these acids and invariably cure this disease.

Dyspepsia and all forms of Nervous Disease.—The Earth Salts alone create the gastric juice and nourish the nervous system.

Liver and Kidney Troubles, Etc., are also due to a lack of the earth salts.

Children. The Rising Generation. Invaluable to promote the healthy growth of children after weaning and during the teething period.

Devonshire's Earth Salts are a food and not a medicine. Are absolutely harmless being a copy of the natural salts found in all foods. Sold in packages. Price 50c, postpaid 55c.

Gentlemen:—For the past two years, until about six weeks ago, when I began to take your Earth Salts, I suffered very much from dyspepsia. I understood from the doctors that my trouble was due to a lack of the gastric juice and that they could do very little or nothing for me, beyond suggesting a scanty diet. Being unable to digest sufficient food, I was gradually starving to death and losing weight daily.

I heard that your Earth Salts were a food which would supply the material to create the gastric juice. I took them as per directions on package and now digest my food perfectly; use several times a week and am in perfect health.

Gentlemen:—I suffered terribly for years from nervous headaches. I found that your Earth Salts were the only preparation on the market which would give me permanent relief. They are invaluable. Yours very truly,

Los Angeles, Cal.

D. F. DALRYMPLE.

Gentlemen:—I suffered a good deal from nervousness, the result of the strain of my business, which is that of card writing and other advertising work. I have used your Salts for some time past and find that my nervousness has disappeared and that I am in a better physical condition than I have been for years.

PROFESSOR P. I. JORDAN.

Room 406 Y. M. C. Association Building, Los Angeles.

From A. G. Goodacre, the Well-known Poultry Judge

Compton, Los Angeles County, California, May 19, 1914.

Gentlemen:—I am pleased to make the following statement relative to your salts:

Results are immediate. I gave a cockerel a small dose in the morning. He had been confined in a coop in the barn a few days. In the afternoon when I went to feed him his grain he was actually up in fighting trim, to my surprise.

Last year we had great mortality in our young ducks. Major Devonshire came down to see us this spring, and he stated most emphatically that if we fed them his Earth Salts we would have no further trouble. The results are that we have only lost one duck, and that one only a few days old, so that the salts have already saved us many dollars.

We have fed it to our young chicks (it won't kill lice), but it keeps our chicks growing and healthy. It is a well-known thing that the horses around here drag their hind feet, and it is freely admitted that this is due to a certain deficiency of some feeding ingredient in the hay grown on this soil. This is another instance where the use of these Earth Salts is highly beneficial.

Yours very truly,

A. G. GOODACRE.

SUGGESTIONS

Eat slow. Chew your food. Do not eat too much. Drink very much water either hot or cold. Avoid coffee as much as possible. Use good coarse bread and vegetables rather than much meat. Practice regular habits of life. Retire early. Be an optimist. Enjoy life. SMILE.

Keep Sarth Salts on your table at all times. They are the cheapest food you use, because they are the very essence of life.

DAILY EGG RECORD

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Eggs JANUARY																	
Hens																	
Eggs FEBRUARY																	
Hens																	
Eggs MARCH																	
Hens																	
Eggs APRIL																	
Hens																	
Eggs MAY																	
Hens																	
Eggs JUNE																	
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Eggs SEPTEMBER																	
Hens																	
Eggs OCTOBER																	
Hens																	
Eggs NOVEMBER																	
Hens																	
Eggs DECEMBER																	
Hens																	

PRICE LIST PETALUMA INCUBATOR AND BROODER PARTS

Lamp Founts Model 59, 80, 80½, 81½. Postpaid (150 miles).....	50c
Lamp Founts Model 82, 82½, 83, 83½. Postpaid (150 miles).....	75c
Lamp Founts Brooder 23, 25, 28. Postpaid (150 miles).....	50c
Lamp Burner Incubator Model 59, 80, 81. Postpaid (150 miles).....	60c
Lamp Burner Incubator Model 80½, 81½. Postpaid (150 miles).....	50c
Lamp Burner Incubator Model 81, 82, 83. Postpaid (150 miles).....	75c
Lamp Burner Incubator Model 81½, 82½, 83½. Postpaid (150 miles).....	60c

This daily egg record will be found very valuable to you when you have tabulated from day to day the number of eggs for each day and compare with the number of hens you have. Keep also some line on the value of the food purchased from month to month.

DAILY EGG RECORD

PRICE LIST OF JUBILEE INCUBATOR AND BROODER PARTS

PRICE LIST OF JUBILEE INCUBATOR AND BROODER PARTS	
Jubilee Incubator or Brooder Lamp, by express, complete with No. 2 Sun-Hingle burner	\$1.25
Jubilee Incubator or Brooder Lamp, by express, complete with No. 3 Sun-Hingle burner	1.50
Tested Jubilee Thermometer, postpaid	.75
Jubilee Egg Tester, postpaid	.35
No. 3 Sun-Hingle burner, postpaid	.60
No. 3 Sun-Hingle burner, postpaid	.60

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BROODER HEATERS	
For 2-Section Indoor Brooder 8.00
For 3-Section Indoor Brooder 9.00
For 4-Section Indoor Brooder	..... 10.00

A FEW INSTRUCTIVE HINTS TO POULTRYMEN

Question:—Would you advise Castor Beans for shade?

Answer:—No; they are poisonous to both Ducks and Geese. Would advise planting fig trees, they do excellent in chicken yard.

Question:—What makes soft shell eggs?

Answer:—Soft shell eggs come from insufficient supply of lime, oftentimes by too heavy feeding. An over-fat hen has a tendency to laying soft shell eggs. Poultry being closely confined and not having sufficient amount of green food such as Alfalfa, Beets, Turnips and Cabbage fed raw will produce soft shell eggs. Use plenty of lime, grit, oyster shells and Devonshire's Earth Salts.

Question:—Which is the best way to feed warm mash to produce eggs?

Answer:—I prefer to give the mash in the morning, mixing with the table scraps and a little alfalfa meal. Give scratch food or wheat in the afternoon or evening.

Question:—How long can I keep eggs for setting?

Answer:—You can keep eggs three weeks or even more by turning them every day. But you must remember that the longer you keep them the fewer will hatch. For incubation we advise not over fourteen days.

Question:—How many chickens can I keep on one acre of ground?

Answer:—On one acre of land you can nicely keep 500 chickens. You must be careful not to have more than 50 to roost in one house. It is the crowded conditions of the house that brings trouble and disease.

Question:—What causes chicks to die in the shell during incubation?

Answer:—There are many reasons for this. One of the principal reasons is often-times poor ventilation in the incubator and lack of airing of eggs during the incubation. We suggest that after the tenth day eggs should be aired at least 10 minutes each day up to the 15th day. After that, if the temperature of the room is 70 degrees, air 20 minutes. Other reasons are that the eggs are obtained from too much inbreeding of fowls which causes the lack of vitality and chickens die during the 17th day of incubation.

Question:—What causes swelled heads and sore eyes on chickens and sometimes causes them to go blind?

Answer:—Chickens with swelled heads and sore eyes have what we call roup, caused from taking cold and also from lice. Draft in their sleeping quarters should be stopped and their heads should be rubbed with an ointment. We suggest that you use A. & M. Head Lice Ointment which you can get at our store for 10c a box.

Question:—How can we preserve eggs, that they may be kept from 6 to 12 months?

Answer:—We suggest that you get one gallon of Water-glass (Silicat Sodium). This is to be used to 10 gallons of water. Boil the water 10 minutes and then allow it to cool. Mix the two together and put in a stone jar or crock. One gallon of water-glass diluted with water will keep 100 eggs.

Question:—What causes white diarrhoea in baby chicks?

Answer:—The primary causes are mainly exposure and improper feed. We suggest that you send for a box of Sterlingsworth Diarrhoea Remedy which we guarantee will cure any case within 48 hours. This being one of the greatest remedies ever manufactured.

AGRICULTURAL BOOKS

	Price. Pstd.		Price. Pstd.
A. B. C. of Agriculture, by Weld	\$.35	\$.40	Ginseng, by Kalner \$.50
Alfalfa, by Coburn	.50	.60	Gregory on Fertilizers ..... .25
The Book of Alfalfa, by Coburn	2.00	2.20	Injurious Insects, by Sempers .. .40
Art of Propagation, by Jenkins	.25	.30	Insects and Insecticides, by Webb 1.50
Asparagus, by Hexamer	.50	.60	Irrigation, by Wilcox 2.00
Avocado Industry, by Popenoë	.15	.20	Irrigation for the Farm, Garden and Orchard, by Stewart 1.00
Bean Culture, by Levey	.50	.60	Mushrooms: How to Grow Them, by Falconer 1.00
Cabbage and Cauliflower, by Allen	.50	.60	New Onion Culture, by Greiner ..... .50
California Fruit and How to Grow It, by Wickson	3.00	3.20	Onion Culture ..... .20
California Vegetables, by Wickson	2.00	2.15	Peanut Culture, by B. W. Jones ..... .50
Celery Culture, by Beattie	.50	.60	Potatoes, by Frazier ..... .75
Cereals of the United States, by Hunt	1.75	1.85	Potatoes for Profit, by Van Ormer ..... .20
Chrysanthemums, by Herrington	.50	.60	Pruning, by Bailey 2.00
1905 Dry Farming, by Campbell	.50	.60	Rhubarb Culture, by J. W. Morse ..... .50
1907 Dry Farming, by Campbell	2.50	2.60	Soils, by Burkett 1.25
Farm Grasses of the U. S., by Spillman	1.00	1.10	Spraying Crops, by Weed ..... .50
Flax Culture	.30	.35	Strawberry Culture, by A. S. Fuller ..... .25
Forage Crops, by Shaw	1.00	1.10	Sweet Potato Culture, by Fritz ..... .50
Garden Helps, by Hall	.75	.85	Talks on Manures, by Harris 1.50
Gardening in California, by Lyon	1.00	1.10	Tobacco Culture ..... .25
			Tomato, by Tracy ..... .50
			Tomato Culture, by Root ..... .30

LITERATURE FOR POULTRYMEN

	Price. Pstd.		Price. Pstd.
American Standard of Perfection (1913)	\$2.00	\$2.20	Leghorns, Brown, White and Buff ..... .50
Artificial Incubation and Brooding	.50	.60	National Standard Squab ..... .40
American Canary and Small Bird Fancier	.50	.60	Poultry Houses and Fixtures ..... .50
Barred White Buff Plymouth Rocks	.50	.60	Poultry Architect ..... .50
Broilers for Profit	.50	.60	Poultry Remedies ..... .25
Bantam Fowl	.50	.60	Profitable Poultry Farming ..... .25
Capons for Profit	.50	.60	Pacific Coast Rabbit Book ..... .25
Diseases of Poultry	.50	.60	Successful Poultry Keeper 1.00
Duck Culture (By Rankin)	.50	.60	The New Egg Farm 1.00
Ducks and Geese	.75	.85	Turkeys, All Varieties ..... .50
			Two Hundred Eggs Per Year; How to Get Them ..... .50
			The Wyandottes 1.00
			Wright's Poultry Book 2.00
			Western Poultry Book 1.00

We are agents for

SKINNER IRRIGATION SUPPLIES

If interested, write for circular.

This irrigation is like a gentle rain. There is no packing of the soil. The spray settles so gently that it is absorbed as rapidly as it is applied, and produces absolute uniformity of water distribution.

Make your own Skinner System

Buy a Skinner Drilling machine with equipment which includes 1 level, 6 tap drills, 1 pair of pliers. Price \$12.00. Extra tap drills, 20c each.

Buy one Skinner Union for each line of pipe. Price (1 in. \$1.85) (1½ in. \$2.50) (2 in. \$2.75).

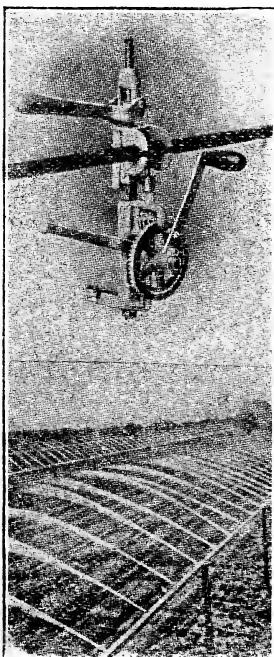
Buy one Skinner Nozzle for every four feet of out-door pipe. Price 5c each.

Buy one Skinner Nozzle for every three feet of inside pipe. Price 7½c each.

Cost of Supplies Per Acre

4 No. 1 Galvanized Union	\$ 7.45
200 Outdoor Nozzles	10.00
1 Skinner Drilling Machine	12.00
<hr/>	
	\$29.45

It requires 280 feet of one inch pipe and 520 feet of ¾ in. pipe per acre. Drill and Skinner System one line sprays 50 feet. See picture.



When giving consideration to their approximate yields and values, take into account the cost in labor, irrigation, time to mature, and expense of marketing. All these figure in determining the net profit. Then consider too the adaptability of each crop to your soil and the purpose for which the crop is intended. All must be considered when deciding the advisability of planting field crops.

The vegetable grower is the greatest speculator in the world, particularly in Southern California, and portions here and there throughout the Southwest. He has all United States for a market during the winter months, and all the arid Southwest in the summer time. He must consider well his soil, be an expert in the selection and use of fertilizers, in the selection of his seed suited to his soil, to his climate, to the time of planting and the market for which he intends to grow. He must know to perfection when to irrigate, to cultivate, and when not to do so. He must not only keep posted as to market conditions and prices, but must figure ahead on these conditions.

When in doubt buy Aggeler & Musser's seeds, use Wizzard Fertilizer, and always consult AGGELER & MUSSER SEED CO. on all the above questions. Ask for their garden manual.

SEEDS REQUIRED PER ACRE FOR FIELD CROPS IN SOUTHERN CALIFORNIA

VARIETY	NUMBER OF PLANTS OR AMOUNT OF SEED	HOW TO PLANT	APPROXIMATE YIELD	AVERAGE VALUE
				\$60. \$100 to \$150
Affaria	25 lbs. seed	Drill or broadcast	8 to 10 tons hay, or 600 lbs. seed	\$55 to \$60
Affaria	8 lbs. seed	Broadcast	3 tons hay, and pasture	\$55 to \$60
Barley	100 lbs. seed	Drill or broadcast	2 to 4 tons hay	\$55 to \$80
Beans, Bush	25 to 40 lbs.	Drill or broadcast	1500 to 2000 lbs.	\$55 to \$100
" Lima	50 to 60 lbs.	Drill in rows 2 ft. apart	1500 to 2000 lbs.	\$55 to \$100
" Windsor	100 lbs.	Drill in rows 3 ft. apart	Hog pasture and green manuring	\$100 to \$125
Beets, Stock	8 lbs.	Drill in rows 2 ft. apart	20 to 25 tons of beets	\$100 to \$125
Buckwheat	45 lbs.	Drill or broadcast	Green manuring	\$100 to \$125
Burnt Clover	20 lbs.	Drill or broadcast	Pasture and Green manuring	\$100 to \$125
Canyary	50 lbs.	Drill or broadcast	1/2 tons hay	\$100 to \$125
Caraway or Sorghum	10 lbs.	Drill or broadcast	10 tons green fodder	\$100 to \$125
Carrots, Stock	4 lbs.	Drill in rows 1 1/2 ft. apart	20 to 25 tons of carrots	\$100 to \$125
Corn, Broom	10 lbs.	Drill in rows 2 ft. apart	1/2 ton broom straw	\$100 to \$125
Egyptian	10 lbs.	Drill in rows 1 ft. apart	1/4 tons grain	\$100 to \$125
Ensignage	80 lbs.	Drill in rows 1 ft. apart	2 tons grain	\$100 to \$125
" Field	10 lbs.	Hills 2 ft. apart, rows 3 ft. apart	2 tons grain	\$100 to \$125
" Kaffir	10 lbs.	Drill in rows 2 ft. apart	1 1/2 tons grain	\$100 to \$125
Milo Malize	10 lbs.	Drill in rows 2 ft. apart	1/2 tons grain	\$100 to \$125
Pop	6 lbs.	Hills 1 ft. apart, rows 2 ft. apart	1 ton grain	\$100 to \$125
Cotton	25 lbs.	Drill in rows 4 ft. apart	1 1/2 bales and seed	\$100 to \$125
Cow Peas	25 lbs.	Drill in rows 2 ft. apart	2 tons grain	\$100 to \$125
Fertertia	10 lbs.	Drill in rows 2 ft. apart	1 1/2 tons grain	\$100 to \$125
Frax	60 lbs.	Drill or broadcast	1 ton grain	\$100 to \$125
Pennycreek	35 lbs.	Drill or broadcast	Pasture (damp land)	\$100 to \$125
Grass, Bermuda	8 lbs.	Broadcast	Hay and pasture (damp land)	\$100 to \$125
" Italian Rye	20 lbs.	Broadcast	Cut 1/2 tons per acre 4 times per year	\$100 to \$125
" Parra	40,000 stems	Broadcast	Cut 1/2 tons per acre 4 times per year	\$100 to \$125
" Paspalum	10 lbs.	Broadcast	Hay and pasture	\$100 to \$125
" Peren. Rye	20 lbs.	Broadcast	Cut 2 tons per acre 6 times	\$100 to \$125
" Rhodes	10 lbs.	Broadcast	Cut 2 tons per acre 6 times	\$100 to \$125
" Soudan	10 lbs.	Broadcast	Cut 100 days for fiber	\$100 to \$125
Hemp	60 lbs.	Broadcast	3 tons hay or 1 ton grain	\$100 to \$125
Oats	80 to 100 lbs.	Drill or broadcast	Pasture and green manuring, or 1 ton grain	\$100 to \$125
Rye	60 lbs.	Drill or broadcast	2 tons hay or 1 ton grain	\$100 to \$125
Vetch	60 lbs.	Drill or broadcast	2 tons hay or 1 ton grain	\$100 to \$125
Wheat	60 to 80 lbs.	Drill or broadcast	2 tons hay or 1 ton grain	\$100 to \$125

SEEDS AND PLANTS PER ACRE FOR VEGETABLES

VARIETY	SEED	PLANTS	YIELD	VALUE
Asparagus	3 lbs.	10,000	Indefinite	\$200 to \$300
Beans, String	50 lbs.	Drill	Indefinite	\$100 to \$200
Beets, Table	12 lbs.	Drill	Indefinite	\$100 to \$200
Cabbage	3 lbs.	14,500	10 sacks	\$100 to \$200
Carrot	4 lbs.	Drill	10 sacks	\$100 to \$200
Cauliflower	1/2 lbs.	12,000	8,000 heads	\$100 to \$200
Celeri	1/2 lbs.	29,000	400 boxes	\$100 to \$200
Corn, Sweet	10 to 20 lbs.	Hills	Indefinite	\$100 to \$200
Cucumber	3 lbs.	2,100 hills	Indefinite	\$100 to \$200
Big Plant	1/2 lbs.	7,000	600 crates	\$100 to \$200
Lettuce	3 lbs.	60,000	Indefinite	\$100 to \$200
Melons, Casaba	1 lbs.	680 hills	Indefinite	\$100 to \$200
Melons, Musk	1 lbs.	1,200 hills	Indefinite	\$100 to \$200
Peas	1 lbs.	435 hills	Indefinite	\$100 to \$200
Onion	3 lbs.	250 lbs. sets	Indefinite	\$100 to \$200
Peppers	60 lbs.	Drill	Indefinite	\$100 to \$200
Potato, Irish	60 lbs.	12,000	600 to 1000 sacks	\$100 to \$200
Potato, Sweet	40 lbs.	14,520 hills	100 to 200 sacks	\$100 to \$200
Pumpkin	1 lbs.	12,000 hills	Indefinite	\$100 to \$200
Rhubarb	2 lbs.	500 hills	Indefinite	\$100 to \$200
Squash, Hubbard	1 lbs.	680 hills	Indefinite	\$100 to \$200
Tomato	3 lbs.	2,000 plants	Indefinite	\$100 to \$200
Turnips	3 lbs.	Drill	Indefinite	\$100 to \$200

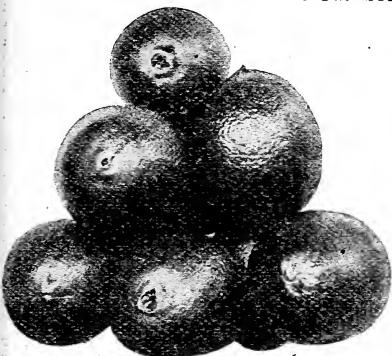
FRUIT TREES

All prices f. o. b. Los Angeles, Cal. Write for quantity prices on all trees.
See pages 4 to 7.

At the proper planting season we have on hand fruit and ornamental trees of such varieties as are in general demand for beautifying the home grounds as well as adding the luxury of home grown fruits.

CITRUS FRUIT TREES

On sale at our branch store, 115 N. Main Street



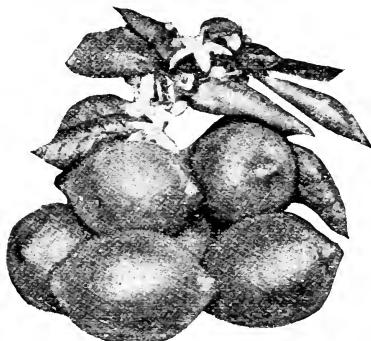
Washington Navel Orange

Orange—Kumquot.—The tree is small but ornamental; fruit olive-shaped, orange yellow and exceedingly aromatic; is candied by the confectioner and is in much demand. Ripens May to July. Price \$2.50 each.

Lemon—Eureka.—The favorite variety in California. Because of its good keeping qualities it is the favorite with the shipper, and because it is a prolific bearer throughout the year, of medium sized, well-shaped, nearly seedless fruit, it is the favorite with the grower. Price \$1.25 each.

Pomelo, or Grape Fruit, Marsh's Seedless.—The best of all Pomelos; sweet and seedless, with thin rind; an early and continuous bearer. Price \$2.00.

Pomegranate.—Beautiful tree, bearing fruit the first year. Price 50c each.



Eureka Lemon

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The AGGELER & MUSSER SEED CO., Inc.

113-115 N. Main Street

Los Angeles, Cal., U. S. A.

Please forward the following ORDER, for amount enclosed, to

Write distinctly.

Name
.....

Amount Enclosed

Street P. O. Box.....

P. O. Money Order.....

Post Office..... R. F. D. No.....

County State

Forward By { Mail
Express or
Freight

Stamps

Stamps, -----

Total.....

Date, 191.....

Name of Station or Exp. Office.....

NOTICE—We give no warranty, express or implied, as to description, quality, productivity, or any other matter of any seeds or bulbs we send out and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once. Aggeler & Musser Seed Co.

EXTRA ORDER SHEETS AND RETURN ENVELOPES FURNISHED ON REQUEST

Please do not ask questions on this Order Sheet, but kindly write them and all communications requiring an answer on a separate sheet of paper and inclose with your order. Be sure that your Full Name and Address are on Both Letter and Order.

This space is for remarks about your order.

The AGGELER & MUSSER SEED CO., Inc.

113-115 N. Main Street

Los Angeles, Cal., U. S. A.

Please forward the following ORDER, for amount enclosed, to

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Amount Enclosed

Street P. O. Box

P. O. Money Order.....

Post Office R. F. D. No.

Exp. Money Order.....

County	State
--------	-------

Forward By { Express or

Stamps, -----

Forward by Freight

10. The following table shows the number of hours worked by each employee.

Name of Station or Exp. Office.....

Date _____ 191

NOTICE—We give no warranty, express or implied, as to description, quality, productivity or any other matter of any seeds or bulbs we send out and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once. Aggeler & Musser Seed Co.

EXTRA ORDER SHEETS AND RETURN ENVELOPES FURNISHED ON REQUEST

Please do not ask questions on this Order Sheet, but kindly write them and all communications requiring an answer on a separate sheet of paper and inclose with your order. Be sure that your Full Name and Address are on Both Letter and Order.

This space is for remarks about your order.

Owing to the diversity of the soil and climatic conditions of the great Southwest, it is impractical to follow without some deviation any table that might be formulated. We believe this table is as nearly correct as any table can be made, yet the time of planting must vary with each season, and so seldom are the seasons at all similar that there is always an element of risk for the man who plants early. Each month, too, requires certain varieties best suited to the season and purpose for which it is planted.

340 Questions Answered On This Page

VEGETABLE GARDEN CALENDAR FOR OUT-DOOR PLANTING

KIND	SEED FOR 1 ACRE	SEEDS FOR 100 FEET OF ROW	DISTANCE APART FOR HAND CULTIVATION (1)	DISTANCE APART IN ROW (1)	DEPTH OF PLANTING (2)	TIME OF PLANTING (3)	READY FOR USE AFTER PLANTING (4)
Artichoke	1 lb.	1 ounce	4 ft.	3 ft.	1 in.	Apr. to July	4 mos.
Asparagus Seed	3 1/4 lbs.	1 ounce	1 to 2 ft.	3 to 5 in.	1/2 to 1 in.	Feb. to May	2 years
Asparagus Plants	600 lbs.	80	2 to 3 ft.	1 1/2 to 2 ft.	1 to 2 in.	Mar. to Sept.	2 to 3 mos.
Beans, bush	25 lbs.	15 lbs.	1 1/2 to 2 ft.	1 in.	1 to 1 1/2 in.	Mar. to July	2 to 3 mos.
Beans, pole	25 lbs.	15 lbs.	1 1/2 to 2 ft.	1 in.	1 to 1 1/2 in.	All the year	3 to 4 mos.
Betts, Table	10 lbs.	15 lbs.	1 1/2 to 2 ft.	1 in.	1 to 1 1/2 in.	All the year	3 to 4 mos.
Brussels Sprouts	42 lbs.	14 oz.	1 1/2 to 2 ft.	1 in.	1 to 1 1/2 in.	All the year	4 to 5 mos.
Cabbage, early	12 lbs.	4 oz.	2 to 2 1/2 ft.	1 1/2 to 2 ft.	1/2 in.	All the year	5 to 6 mos.
Cabbage, late	4 lbs.	1 oz.	2 to 2 1/2 ft.	1 1/2 to 2 ft.	1/2 in.	All the year	5 to 6 mos.
Carrot	1 1/2 lbs.	1/2 oz.	2 1/2 to 3 ft.	1 1/2 to 2 ft.	1/2 in.	July to Jan.	4 to 5 mos.
Cauliflower	1/2 lb.	1/2 oz.	2 1/2 to 3 ft.	1 1/2 to 2 ft.	1/2 in.	Jan. to May	4 to 5 mos.
Celeri	10 lbs.	1/2 oz.	3 to 4 ft.	1 1/2 in.	1 in.	Mar. to Aug.	2 to 3 mos.
Corn, sweet	10 lbs.	1/2 oz.	4 ft.	1 1/2 in.	1 in.	Mar. to Sept.	2 to 3 mos.
Cucumbers	10 lbs.	1/2 oz.	3 to 2 1/2 ft.	1 1/2 to 2 ft.	1/2 in.	Dec. to July	3 to 4 mos.
Egg Plant	1/2 lb.	1/3 oz.	1 1/2 to 2 ft.	1 1/2 to 2 ft.	1/2 in.	All the year	3 to 4 mos.
Kale, or Borecole	1/2 lb.	1/4 oz.	1 1/2 to 2 ft.	1 1/2 to 2 ft.	1/2 in.	All the year	3 to 4 mos.
Kohlrabi	3 lbs.	1/2 oz.	1 1/2 to 2 ft.	1 1/2 to 2 ft.	1/2 in.	All the year	3 to 4 mos.
Lettuce	1 lb.	1/2 oz.	4 to 6 ft.	6 to 8 in.	1 in.	Mar. to July	3 to 4 mos.
Musk Melon	1 lb.	1/2 oz.	6 to 8 ft.	8 to 10 ft.	1 in.	June to Sept.	3 to 4 mos.
Water Melon	6 lbs.	1 oz.	2 ft.	1 ft.	1 in.	Apr. to July	4 mos.
Okra	3 lbs.	1 oz.	1 to 1 1/2 ft.	2 1/2 to 3 in.	1/2 in.	Aug. to Apr.	5 to 6 mos.
Onion Seed	250 lbs.	sets	1 to 1 1/2 ft.	2 1/2 to 3 in.	1 in.	All the year	4 to 5 mos.
Onion sets	2 lbs.	2 oz.	1 to 1 1/2 ft.	3 to 4 in.	1/2 in.	All the year	4 to 5 mos.
Parsley	4 lbs.	1/2 oz.	1 1/2 to 2 ft.	3 to 4 in.	1/2 to 1 in.	All the year	4 to 5 mos.
Parsnip	60 lbs.	1/2 oz.	2 1/2 to 3 ft.	2 in.	1/2 to 3 in.	Dec. to July	3 to 4 mos.
Paper	1/2 lb.	1/2 oz.	1 1/2 to 2 ft.	1 1/2 to 18 in.	1/2 to 6 in.	June to Sept.	2 to 3 mos.
Potato, Irish	600 lbs.	5 lbs.	2 to 3 ft.	14 to 15 in.	3 in.	Mar. to Aug.	3 to 4 mos.
Potato, Sweet	12,000 lbs.	3 lbs.	3 to 5 ft.	6 to 8 ft.	1 to 1 1/2 in.	Mar. to Aug.	3 to 4 mos.
Pumpkin	12 lbs.	1/2 oz.	1 oz.	1 1/2 to 2 in.	2 to 3 in.	All the year	2 to 3 mos.
Radicish	12 lbs.	1 oz.	1 1/2 to 2 ft.	3 ft.	1 1/2 to 2 in.	Dec. to May	2 to 3 mos.
Rhubarb Plants	5,000 lbs.	33 plants	3 to 5 ft.	1 1/2 to 2 ft.	1 1/2 to 2 in.	All the year	2 to 3 mos.
Salsify	6 lbs.	1 oz.	1 1/2 to 2 ft.	2 to 4 in.	1 1/2 to 2 in.	All the year	2 to 3 mos.
Sauerkraut	30 lbs.	1 oz.	1 1/2 to 2 ft.	2 to 4 in.	1/2 in.	Feb. to Sept.	2 to 3 mos.
Sauerkraut, Summer	2 lbs.	1/4 oz.	3 to 4 ft.	3 to 4 ft.	1/2 in.	Mar. to Aug.	2 to 3 mos.
Squash, Winter	1 lb.	1/4 oz.	7 ft.	7 to 9 ft.	1/2 in.	Feb. to Aug.	3 to 4 mos.
Tomato	1/2 lb.	1/2 oz.	4 to 5 ft.	2 1/2 to 3 ft.	1/2 in.	All the year	3 to 4 mos.
Turnip	3 lbs.	1/2 oz.	1 to 2 ft.	3 to 4 in.	1/2 in.	All the year	3 to 4 mos.

(1)—Distance apart varies with the season and soil.

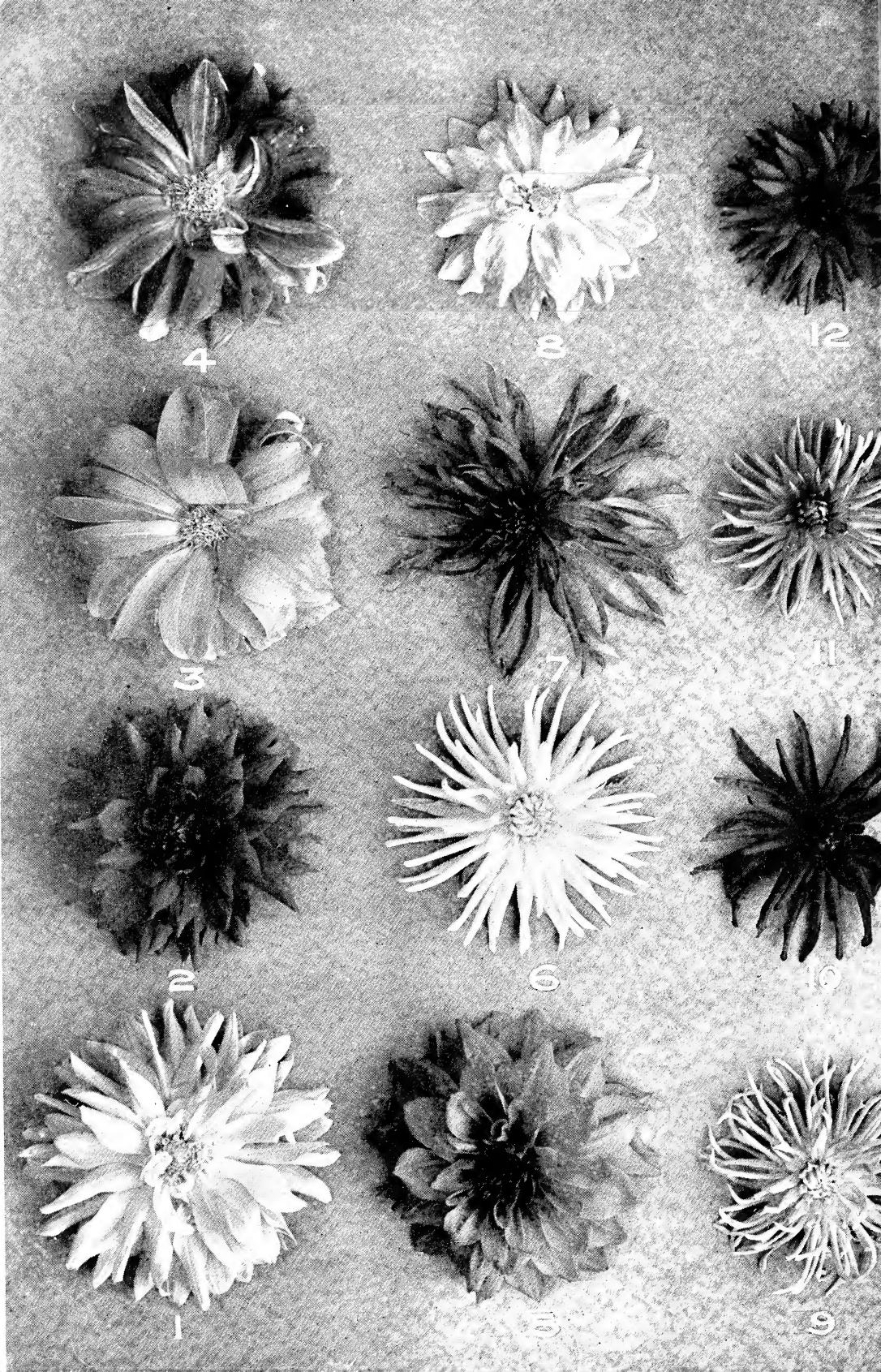
(2)—Depth of planting varies with the season and condition of soil.

(3)—Time of planting varies according to local conditions with regard to temperature and cultural conditions.

(4)—Time of maturity varies with the temperature and cultural conditions. This table shows required time of maturity after transplanting. It requires 6 to 8 weeks longer from time of sowing seed.

*Transplant

†Plant in hills



4

3

12

3

7

11

2

6

10

1

9

13







